

Videos of worked exercises

Step-by-step instructions and advice from Michael Ham

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ACCOUNTING

VCE UNITS 3 & 4

STUDENT BOOK

**NEVILLE
BOX**



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About the author

Author acknowledgements

Neville Box

Neville Box is an experienced and highly esteemed educator who has been teaching VCE Accounting since 1981. He has been involved in the development of Accounting study designs since 2008. His depth and breadth of knowledge, combined with his accessible presentation style, make him a sought-after presenter for professional development events. Neville currently teaches at St Bernard's College in Essendon, Victoria.



I am delighted to present to you the seventh edition of *Accounting VCE Units 3 & 4*. Although it is the seventh edition, it is the first one to be fully published under the banner of Matilda Education. I therefore thank all the staff at Matilda for their support in ensuring that this series has been able to continue for yet another study design. Our goal is to produce a text and relevant support materials to assist students and teachers in VCE Accounting across the state. In particular, I would like to thank Greg Browne (Executive Director) for believing in this project and Olive McRae (Publishing Director) for being the driving force behind the preparation of this series. It has been a pleasure to work closely with Olive as we have further refined this text to suit the needs of teachers. Olive has been able to keep me focused (no small feat!), and has been totally supportive over the last 12 months. She is a highly professional publisher, with innovative ideas, and I thank her sincerely for her efforts in ensuring that this text is second to none. I would also like to acknowledge Robyn Flemming (Editorial), Hannah Tatton (Production), Nicole Melbourne and Jacquie Poon (Typesetting), Katrina Tucker and Kim Lowe (Sales) and the rest of the Matilda team for their support, enthusiasm and professionalism. It has been my pleasure to work with such a positive publishing company.

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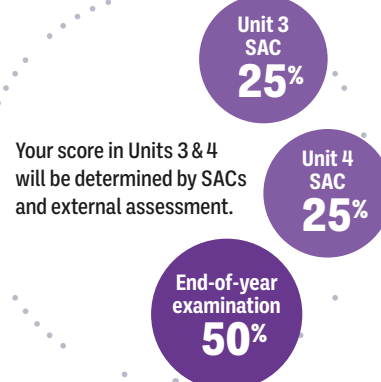
Finally, I thank my loving wife Therese for her support throughout the writing of this text. Thank you, Therese, for your understanding your encouragement, and for your total belief in me and this project. It has certainly been a team effort and your support has made a difficult challenge so much easier.

*For Therese: my best friend,
my soul mate, my loving partner.*

The chapters in each unit are organised to introduce the content logically and to consolidate the key knowledge and skills required to meet the Area of Study (AOS) outcomes.

The table on the following pages provides a summary of the knowledge and skills covered in each chapter and makes suggestions for pacing.

The study design requires at least 50 hours of classroom instruction per unit. Your school will determine the number, type and timing of your School-Assessed Coursework (SAC).



Unit 3

Week	Chapter	AOS	Outcome	Key knowledge	Key skills
1	1 Accounting essentials ETHICAL CONSIDERATIONS	1	1	the accounting assumptions and qualitative characteristics	explain and apply relevant qualitative characteristics and accounting assumptions
2	2 Balance sheets ETHICAL CONSIDERATIONS	1, 2	1, 2	- the classification of assets and liabilities into categories of current and non-current - the effects of transactions on the accounting reports	distinguish between current and non-current assets and current and non-current liabilities
3	3 Accounting systems and business documents CASE STUDY	1	1	documents used by a business to record financial transactions	analyse the effects of financial transactions on the accounting equation
4	4 Double entry recording: An introduction ETHICAL CONSIDERATIONS	1	1	- cash payments and receipts - cash and credit sales - cash and credit purchases - the GST Clearing account	identify and manually record financial data in the general journal and general ledger
5 & 6	5 The general journal and the general ledger CASE STUDY	1	1	- the general journal and general ledger and their use in recording transactions - the purpose and preparation of the trial balance	- use ICT to record transactions in the general journal and the general ledger and prepare accounting reports - explain the purpose of a trial balance
7	6 General journal transactions MODELLING QUESTIONS	1	1	- establishment of a double entry system - contribution of non-current assets at fair value by the owner - correction of errors - inventory used for advertising purposes (GST excluded) - drawings of inventory by the owner (GST excluded)	identify and manually record financial data in the general journal, general ledger and inventory cards
8 & 9	7 The perpetual inventory system ETHICAL CONSIDERATIONS	1	1	inventory cards using the First-In, First-Out (FIFO) and Identified Cost methods for purchases and sales	evaluate the effects of alternative inventory valuation methods and cost assignment methods on the accounting equation



Week	Chapter	AOS	Outcome	Key knowledge	Key skills
10	8 Sales returns and purchases returns	1	1	• sales returns from accounts receivable • purchases returns to accounts payable	• identify and manually record financial data in the general journal, general ledger and inventory cards
11	9 Inventory valuation CASE STUDY	1	1	• product cost and period cost • inventory write-down • the lower of cost and NRV rule • impact of inventory valuation on accounting reports	• identify and manually record financial data in the general journal, general ledger and inventory cards
12	10 Closing the general ledger	1	1	• the process of balancing general ledger accounts for assets, liabilities and owner's equity • the recording of closing entries for revenue and expenses in the general journal and the general ledger	• prepare the Profit and Loss Summary account in the general ledger, with transfer of profit or loss to the Capital account in the general journal and the general ledger • record the transfer of drawings to the Capital account in the general ledger
13	11 Income statements	2	2	• the characteristics and use of classified accounting reports: income statements • financial indicators and non-financial information used to measure business performance	• construct appropriate graphical representations related to preparing and interpreting accounting reports • model and analyse the financial effects of alternative strategies to improve business performance
14	12 Management and accounting reports	1	1	• internal control procedures to safeguard resources against theft and fraud • financial indicators: inventory turnover, accounts payable turnover, accounts receivable turnover • non-financial information available to assist analysis and decision-making in relation to inventory, accounts receivable and accounts payable	• explain and apply appropriate internal control procedures • discuss strategies to improve the management of inventory, accounts receivable and accounts payable
15	13 Bad and doubtful debts ETHICAL CONSIDERATIONS	1	1	• the writing-off of bad debts using the allowance method in the subsequent period	• identify and manually record financial data in the general journal and general ledger.
16	14 Cash flow statements CASE STUDY	2	2	• the characteristics and use of classified accounting reports: cash flow statements • the distinction between cash and profit	• construct appropriate graphical representations to assist with the analysis of classified accounting reports and other information to evaluate the performance of a business • distinguish between cash and profit

Unit 4

Week	Chapter	AOS	Outcome	Key knowledge	Key skills
1	15 Straight-line depreciation ETHICAL CONSIDERATIONS	1	1	- the accounting assumptions and qualitative characteristics - the recording and reporting of balance day adjustments - method of depreciation: straight-line	- identify and record financial data and report accounting information - use ICT, including spreadsheets, to model and analyse alternative depreciation methods
2	16 Reducing balance depreciation MODELLING QUESTIONS	1	1	- method of depreciation: reducing balance - the implications of alternative methods of depreciation for accounting reports	compare alternative methods of depreciating non-current assets and justify the method selected
3	17 Buying and selling non-current assets CASE STUDY	1	1	- the purchase of non-current depreciable assets for cash - the purchase of non-current depreciable assets financed by a loan - the recording and reporting of the disposal of a non-current depreciable asset	evaluate the effects of alternative methods of depreciating non-current assets on accounting reports
4 & 5	18 Balance day adjustments: Part 1 CASE STUDY	1, 2	1, 2	- prepaid expenses (asset approach), with GST being recorded at the time of payment - accrued expenses, with GST being recorded at the time of payment - the payment of accrued expenses in the subsequent reporting period	- analyse the effects of balance day adjustments on accounting reports - prepare an adjusted trial balance
6 & 7	19 Balance day adjustments: Part 2 ETHICAL CONSIDERATIONS	1, 2	1, 2	- unearned revenue (liability approach), with no GST recorded at the time of the deposit - accrued revenue, with GST being recorded at the time of receipt	analyse the effects of financial transactions on the accounting reports
8 & 9	20 Budgeting MODELLING QUESTIONS	2	2	- the characteristics and use of classified budgeted accounting reports - the distinction between cash and profit - graphical representations related to preparing and interpreting budgeted accounting reports	- manually prepare classified budgeted accounting reports - use ICT to prepare and analyse classified budgeted accounting reports and variance reports - construct graphical representations to assist with analysis and evaluation of performance





Week	Chapter	AOS	Outcome	Key knowledge	Key skills
10	21 Budget variance reports	2	2	the use of variance reports and trends for cash flow statements and income statements	- manually prepare variance reports - prepare and analyse classified budgeted accounting reports and variance reports, and construct graphical representations
11	22 Evaluation of business performance CASE STUDY	2	2	indicators and other relevant information (financial and non-financial) used to measure business performance	analyse and interpret classified historical, budgeted and variance reports, graphical representations and other information to evaluate the performance of a business
12	23 Additional performance indicators MODELLING QUESTIONS	2	2	the analysis of historical and budgeted accounting reports, including a consideration of the limitations of analysis, to develop strategies to improve business performance	- model and analyse the financial effects of alternative strategies to improve business performance - discuss strategies to improve the performance of a business
13 & 14	Revision & practice exams			Recommended exams 2019 onwards	

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Exam preparation activities in every chapter

Practice will improve your score.
Stay organised and complete all the activities in the chapter.

Prior knowledge quiz

Consolidate key knowledge prior to starting a new chapter.

Topic quiz

Check your understanding before starting a new topic.

Chapter revision quiz

Sharpen your recall with the chapter revision quizzes.



Revision notes: PPT summarising key concepts

Customise to make personalised study notes.



Exercises (completed on paper or in Excel spreadsheets)

Record transactions both manually and using ICT.



Ethical considerations, case studies, modelling activities

Build your skills in applying theoretical knowledge to simulated situations.

Modelling questions provide the opportunity to model and analyse.

Exam-style questions

Reduce anxiety and identify gaps in your knowledge and skills.

Video of selected exercises and exam-style questions being completed, with step-by-step instructions and advice.

Develop confidence and build familiarity with the process of successfully answering questions.



Opportunities to apply theoretical knowledge to simulated situations, to use ICT and to practise accounting terminology are woven throughout the text.





UNIT 3

Financial accounting for a trading business

The content in Unit 3 of the VCE Accounting course will be covered in the following chapters.

Chapter 1	Accounting essentials	2
Chapter 2	Balance sheets	17
Chapter 3	Accounting systems and business documents	39
Chapter 4	Double entry recording: An introduction	64
Chapter 5	The general journal and the general ledger	80
Chapter 6	General journal transactions	106
Chapter 7	The perpetual inventory system	123
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CHAPTER

1

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Accounting essentials

KEY TERMS

Assets
Entity
Liabilities
Accounts payable
Owner's equity
Revenues
Accounts receivable
Expenses
Accounting standards
Relevance
Faithful representation
Comparability
Verifiability
Timeliness
Understandability
Accounting assumptions
Accounting entity assumption
Accrual basis assumption
Going concern assumption
Period assumption

This chapter focuses on the rules of accounting (including its accounting assumptions and qualitative characteristics), some essential terms and definitions that accountants use, and ways to present information in financial reports.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** why small businesses need financial information [\[1.1\]](#)
- **name** the users of financial information and **describe** the types of information they need [\[1.1\]](#)
- **define** the five key elements of accounting: assets, liabilities, owner's equity, revenues and expenses [\[1.2\]](#)
- **distinguish** between current and non-current assets and liabilities [\[1.2\]](#)
- **describe** the six qualitative characteristics of financial information and **outline** the role of each [\[1.3\]](#)
- **describe** the four accounting assumptions and **outline** the role of each [\[1.4\]](#)

Estimated time required: 1 week



1.1 Why is accounting useful?



It's easy to underestimate the importance of accounting in business. While entrepreneurs and executives are the visible faces of a business, accountants work behind the scenes. Yet, it's the accountants' work that gives entrepreneurs the financial information they need to make better decisions that will keep their businesses profitable and enable them to grow.

Business owners need to know if their business is making or losing money. Accounting involves reporting information about profits or losses, but this is only one of its many uses. Although it's invisible to some people, accounting is a core part of a successful business's overall management strategy.

Answering financial questions

Business owners and managers have to consider many financial questions. For example:

- Is my business's profit improving or declining?
- Am I earning a sufficient return on my investment?
- Can my business repay its outstanding debts?
- Are my credit customers paying on time?
- What is the cost of my business's assets, and how are they financed?

To answer these questions, owners and managers need to be able to analyse up-to-date financial information about every aspect of their business. This information comes from accountants, and from the systems they manage for recording financial data. By collecting, classifying and reporting on that data in a meaningful form, accountants provide business owners with the answers they need.

Many businesses, especially small ones, collapse because of the lack of available, meaningful information. If a business owner is well informed, their business has a better chance of surviving, or even thriving.



Accounting provides the financial information every business needs, whether it's a startup or a large corporation.

Providing appropriate information

A business needs many types of financial information. Table 1.1 shows the different types of information that different users need. The user of the financial data decides what information is relevant to them. Accounting must meet the needs of individual users and be flexible enough to satisfy a variety of purposes.

Table 1.1 Users of financial information and the types of information they need

User	Information needed
Owners/managers of a business	Profit, liquidity, stability, sales, growth, budgets, inventory management, accounts receivable, accounts payable, return on investment
Prospective owners	Budgets, future earnings, predicted returns, stability, growth prospects
Banks/lenders	Liquidity, stability, budgets
Suppliers of goods or materials	Credit rating, reliability, stability
Employees/unions	Stability of employment, profits, the likelihood of wage increases
Customers	Pricing, credit facilities, future trading opportunities
Government departments	Specific needs relating to their own specialist areas

Accounting information needs to be relevant to a variety of users.

Accounting cannot provide answers to all business problems. However, if the accounting system functions properly, accountants can prepare meaningful reports based on accounting data to assist decision-makers. Accounting is vital for communicating financial information that is accurate, timely and useful.

Ethical compliance

In addition to financial indicators, some accounting users may be interested in a business's social or environmental impact, or its ethics. When considering social, environmental or ethical questions, you should assess the potential impact of a decision on the following:

Ethical considerations can be related to a range of topics in the VCE course. Keep this in mind as you progress through this text.

- financial costs to a business
- financial benefits to a business
- the general reputation of a business and its owner(s)
- the environment
- the financial and emotional wellbeing of a business's owners and customers.

There are many certifications that businesses can use to signal their values. Research these logos to see what conditions a business has to meet to use them on their products.



1.2 The elements of accounting



When accountants prepare financial reports, they are providing information on the five elements of accounting: assets, liabilities, owner's equity, revenues and expenses. You will be considering and referring to these five elements throughout your Accounting studies, so it's important to have a full understanding of them.

Assets

Assets are present economic resources controlled by an **entity** as a result of past events. An economic resource is a right that has the potential to produce economic benefits in the future. There are two types of assets controlled by business entities: current assets and non-current assets.

Current assets are held primarily for the purpose of sale or trading, or because the business reasonably expects they can be converted into cash, sold or consumed within 12 months from the end of the current accounting period. The classification of current assets includes cash on hand, cash at bank, inventory (the goods bought and sold by a trading business) and amounts owing by credit customers (known as accounts receivable).

Non-current assets are economic resources that a business expects to use for a number of years and which aren't held for the primary purpose of resale. This classification includes assets such as vehicles, machinery, office furniture, computers and shop fittings.

assets economic resources under the control of an entity that have the potential to produce economic benefits

entity any person, business or organisation for which accounting records are maintained



Office furniture is an example of a non-current asset.

liabilities obligations to transfer economic resources to another entity

accounts payable businesses owed money as a result of providing inventory on credit

Liabilities

Liabilities are present obligations of an entity to transfer economic resources as a result of past events. Liabilities include commitments to suppliers of inventory (referred to as **accounts payable**), Goods and Services Tax (GST) owed to the Australian Taxation Office (ATO), and loans due for repayment in future accounting periods. Liabilities may be current or non-current.

Current liabilities are obligations that are due to be settled within 12 months from the end of the current reporting period. They include accounts payable (which are often based on 30 days' credit), GST owing, bank overdrafts and short-term loans (up to 12 months).

Non-current liabilities are obligations that don't need to be settled within 12 months from the end of the current reporting period, such as a five-year loan or a 20-year mortgage loan.

Owner's equity

owner's equity the residual interest an owner has in a business after liabilities are deducted from assets

Owner's equity is the residual interest the owner has in an entity's assets after all its liabilities are deducted. This definition of equity is based on the following equation, often referred to as the accounting equation:

$$\begin{aligned}\text{Assets} &= \text{liabilities} + \text{owner's equity} \\ A &= L + OE\end{aligned}$$

This equation can be expressed in a second form to highlight the owner's equity (also known as the net worth of the owner):

$$\begin{aligned}\text{Owner's equity} &= \text{assets} - \text{liabilities} \\ OE &= A - L\end{aligned}$$

These terms, and their presentation in reports, will be covered in more detail in Chapter 2.

Revenues

revenues increases in assets, or decreases in liabilities, that result in an increase in owner's equity

accounts receivable customers who owe the business money as a result of being provided with goods on credit

Revenues are increases in assets or decreases in liabilities (other than increases or decreases that relate to contributions by the owner) that result in an increase in owner's equity. Revenue includes sales of goods or the provision of services, for either cash or credit. In both cases, an increase in assets occurs because the business has control over a future economic benefit in the form of cash or **accounts receivable**. The transaction must be able to be reliably measured for the revenue item to be recognised (recorded).

Revenue may also include items such as interest on investments, commissions on sales and reductions in debts. For example, a reduction in a liability may occur if a supplier offers a discount for prompt payment. If a firm settles its debts promptly and receives a discount from a supplier, this satisfies the definition of a revenue item. As long as there is an increase in assets (other than as a result of a contribution by the owner) or a decrease in liability that leads to an increase in equity, a revenue item should be recognised.

Expenses

Expenses are decreases in assets or increases in liabilities (other than decreases or increases that relate to distributions to the owner) that result in a decrease in owner's equity. Expenses include items such as wages, rent, the cost of goods sold by a trading business, and discounts offered to accounts receivable. If a business decides to offer a discount to credit customers for prompt payment of an amount, this leads to a decrease in assets, which then leads to a decrease in owner's equity.

expenses decreases in assets, or increases in liabilities, that result in a decrease in owner's equity

From 'assets' to 'expenses'

Assets are those resources under the control of an entity that are expected to produce economic benefits. If the entity uses up these resources in its operations, these assets then become expenses. However, when using up these assets and creating expenses, the entity usually generates and earns revenue.

For example, a clothing store may buy inventory consisting of shirts, jeans, suits and ties. This inventory represents an asset of the business. These items are then used up to make sales. When inventory items (which were an asset) are sold, they become an expense. The clothing store is then paid for the goods it provides and so earns revenue. For a profitable business, the revenue earned over a period of time should be greater than the value of the assets that were consumed as expenses. The clothing store can then use some of that revenue to purchase more inventory (i.e. more assets) ready for the next sales. This relationship between assets, revenues and expenses determines a business's profit.

EXAM-STYLE QUESTION

State three features of an item that indicate it is an asset of a business. (3 marks)

Sample answer

1. *The item is an economic resource.*
2. *The resource is under the control of the business entity.*
3. *The resource is expected to generate future economic benefits for the business.*

Exam advice

Revise the definitions of the elements of accounting prior to any assessment. You may be asked to define an accounting term or to describe the features of a particular item or group of items in a financial report.

In the above example, you would need to identify three key features of an asset. Don't simply write a rote-learned definition if you are asked such a question. State the features as separate items to ensure you have identified three different features.

Don't avoid using technical language in your exam responses. Accounting involves lots of technical terms. Your answers will be of a higher standard if you can use these technical terms correctly when responding to exam questions.



1.3 Characteristics of accounting reports

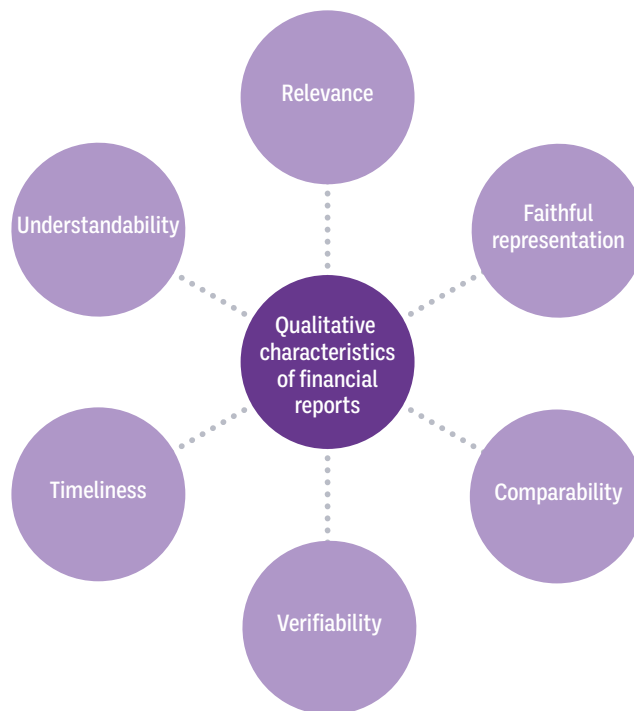
accounting standards rules and regulations that outline acceptable accounting practices and procedures

The International Accounting Standards Board (IASB) approves the rules of accounting worldwide. Rather than each country establishing its own rules and regulations, the accounting profession needed a set of internationally recognised **accounting standards**. The aim was to establish a uniform approach to preparing financial statements that professional accountants anywhere in the world could follow.

The result was the Accounting Conceptual Framework. The Framework describes the objectives of financial reporting, the concepts it is based on, and the six main characteristics that all financial reports should have. These characteristics (shown in Figure 1.1) are *qualitative* – that is, they relate to the focus and *quality* of a report's content, not its quantity.

Figure 1.1 The six main qualitative characteristics of financial reports

To help you remember the six qualitative characteristics, use the acronym 'TURF-CV' in your revision notes.



Relevance

relevance usefulness of financial information in helping users to make decisions

Information that is **relevant** can potentially make a difference to the decisions made by its users. Relevant financial information helps users to predict the outcomes of past, present or future events. It may also provide suitable feedback about previous evaluations or decisions.

The *nature* of an item may not be the only test of whether it is relevant. If its dollar *value* is insignificant, this may not be relevant information. For example, cents are usually rounded off to the nearest dollar in financial statements, as these small values don't affect decision-making.

Faithful representation

faithful representation the requirement that financial information must accurately reflect economic events

The financial information in the report must be a **faithful representation** of real-world economic events that took place during a specific time period. The users of the report should feel confident that the information presented is complete, correct and neutral (i.e. not based on personal opinions to any significant degree).

Comparability

Comparability ensures that users can identify and understand similarities and differences in financial reports by following consistent accounting standards and policies. Information about an entity is more useful if it can be compared with similar information about other entities or about the same entity in different reporting periods.

comparability the ability to compare similar types of financial information effectively with other entities or over different reporting periods

Verifiability

Verifiability means that the information presented in reports accurately represents what it is intended to represent. This means the information is supported by evidence (e.g. invoices, receipts and bank statements) that users can check.

verifiability the premise that financial information is supported by evidence that can be used to check its accuracy

Timeliness

Timeliness means making information available to users as quickly as possible so that they can take action. The older information is, the less useful it will be. For example, if the costs of running a business are increasing and putting the business at risk, the owner needs to know as soon as possible so they can decide what to do. If this information isn't available until the end of the year, it may be too late.

timeliness providing information to users as quickly as possible so that it remains useful for decision-making

Understandability

Understandability means that users with a reasonable knowledge of business and economic activities should be able to understand the financial information. Information in reports should be presented clearly and concisely. Headings and subheadings should help general users to understand the content.

understandability presenting financial information clearly and concisely so that users can easily understand it

EXAM-STYLE QUESTION

The owner of a hardware store purchased a second-hand delivery van for \$24 000. His friend said, 'You got a great price there. I bought the same model last week and paid \$28 000!' State the value for recording the van in the books of the hardware store. Justify your answer, with reference to a qualitative characteristic of accounting. (3 marks)

Sample answer

Faithful representation demands that all economic events be accurately reported and shouldn't be based on personal opinions if possible. Therefore, the van should be reported as costing \$24 000, as this accurately represents the purchase. This value would also be supported by a business document and therefore isn't a personal opinion. As the business didn't buy the van for \$28 000, that value isn't relevant to it.

Exam advice

Accounting assumptions and qualitative characteristics (QCs) appear on most exams. Always include the name of the assumption or qualitative characteristic in your answer. A good idea is to start your response with your assumption or QC. This ensures that you won't forget it in your response. One mark is usually available for naming the correct assumption or QC. The other 2 marks would be for your explanation or justification.

Don't include two or three assumptions or QCs if you are asked to state ONE assumption or ONE QC in your answer. In such a case, always select what you believe is the strongest response and explain your choice thoroughly. Don't refer to a second assumption or QC to try to strengthen your answer. Be clear in your choice and fully explain it.



1.4 The accounting assumptions

accounting assumptions

accepted practices and assumptions followed when creating financial reports

accounting entity assumption

the requirement that a business has its own financial status and a separate position from that of its owner or other entities

accrual basis assumption

recording revenue when it is earned and expenses when they are incurred

going concern assumption

a business will continue to operate, and isn't expected to be wound up in the near future

period assumption

financial activities are recorded and reported on for a particular period of time

In addition to the six qualitative characteristics, four **accounting assumptions** guide creators of financial reports. These assumptions are based on generally accepted accounting practices and procedures; they help to ensure that financial reports are prepared in a similar way across all businesses.

The **accounting entity assumption** stipulates that records of assets, liabilities and business activities of an entity are kept separate from records relating to the activities of the owner of the entity or of other entities. A separate set of accounting records should be maintained for each entity, and any financial statements prepared should provide information only about that entity.

For accounting purposes, the business is always viewed as a separate entity from the owner(s), whether it is a sole trader, a partnership or a company. This assumption supports the qualitative characteristic of *relevance*; personal transactions are excluded, as they are irrelevant to the business entity. This allows the performance of the business to be evaluated, as financial decisions will be based only on the activities of the business entity.

The **accrual basis assumption** is that revenue is recognised when it is earned, not when the cash is received, and that expenses are recognised when they are incurred, not when they are paid. Under this assumption, profit is determined by subtracting expenses incurred during a period from the revenue earned during that period.

The **going concern assumption** is that a business entity will continue to operate, and not be wound up, in the foreseeable future. Financial statements prepared under this assumption help users to distinguish between assets that are expected to provide economic benefit in future periods and expenses that are totally consumed within the current reporting period.

The **period assumption** is that financial reports are prepared for a particular period of time, such as a month, a quarter or a year. Revenues and expenses can then be compared over that one period of time, allowing a profit or a loss to be determined for that reporting period. If this is done consistently, results can be compared from one reporting period to the next and the performance of the business entity can be evaluated in a meaningful way.

EXAM-STYLE QUESTION

Explain why accountants follow the entity assumption.

(2 marks)

Sample answer

In order to evaluate the performance of a business and calculate an accurate profit figure, the entity assumption demands that personal transactions, personal assets and the assets of other business entities are excluded from the business's books.

Exam advice

An *Explain*-type question is usually worth 2 marks, which means your answer must include two distinct points. Add a further point or an example to fully explain your answer if necessary or to demonstrate your knowledge of the topic.

Don't write one point and then try to reword it to make it look like a second point. Assessors will detect such responses and will award only 1 mark instead of 2.

Essential terms in accounting

Accounting uses a technical language that you must thoroughly understand. Key terms will be introduced throughout this text but, as a starting point, here are a few examples of key terms we use in the world of accounting.

- **Inventory.** A trading business purchases goods for the purpose of selling them at a higher price. The goods a business buys for this purpose are known as inventory.
- **Accounts payable.** These are the suppliers of inventory to our business. We generally buy in bulk from accounts payable. This is usually done on credit, so the goods don't have to be paid for when they are delivered. Credit terms can vary but are usually 30 days.
- **Accounts receivable.** These are customers of our business who are allowed to buy from our business on credit. Many trading businesses only sell for cash, but some provide a credit facility to trusted customers.
- **Capital.** A business owner usually contributes an amount of cash to commence their business. This is known as a capital contribution and establishes the item 'owner's equity' in the books of the business. An owner may also contribute other assets to a business as their capital (e.g. vehicles, computers and office furniture).
- **Drawings.** Once a business has been established and is trading successfully, the business owner may withdraw some assets from the business for their personal use (e.g. cash or even inventory). When an owner makes such a withdrawal, its value should be recorded as 'drawings'.
- **Income statement.** A financial report used to determine the profit or loss made by a business over a period of time.
- **Cash flow statement.** A financial report used to report on the cash inflows and cash outflows of a business over a period of time.
- **Balance sheet.** A statement showing the financial position of a business at one particular point in time.
- **GST Clearing account.** A record of the GST charged to and received from customers and the GST charged by and paid to suppliers.
- **GST liability.** A situation where the GST collected from and charged to customers exceeds the amount of GST paid to and charged by suppliers.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [1.1]** Accounting is a tool that analyses financial data and provides financial information. It is a key part of a business's overall management strategy.
- [1.1]** Users of financial information determine how it is to be used. Accounting must meet the needs of the individual user and be flexible enough to satisfy a variety of purposes.
- [1.2]** Accountants provide information on five main elements of financial information: assets, liabilities, owner's equity, revenues and expenses.
- [1.3]** The Accounting Conceptual Framework describes the six qualitative characteristics that financial reports should have.
- [1.4]** There are four accounting assumptions that ensure financial reports are prepared in a similar way across all businesses.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Accounting assumptions

Carlos Tinsey is trying to determine the value of cash to be reported as an asset in the books of his business, which trades as Tinsey's Tacos. He has provided the following information:

- balance of his business bank account: \$11 000
- balance of his personal savings account: \$2500
- mortgage loan on his home: \$400 000
- cash on hand in the business: \$1000
- personal savings kept in his safe at home: \$5500.

Calculate the value of the asset 'Cash' for Tinsey's Tacos. Justify your calculation with reference to an accounting assumption.

2 Accounting elements

Melbourne Magazines publishes a range of magazines that are sold only to private subscribers. The business accepts prepaid subscriptions; customers can pay in advance for a one-, two- or three-year subscription. During 2027, the firm received a total of \$180 000 for its three-year subscriptions covering the years 2028, 2029 and 2030. How should this \$180 000 be reported in the financial reports of Melbourne Magazines for the year 2027?

In your answer, discuss whether the amount in question should be treated as a revenue item or a liability item. You should also refer to the definitions of the key elements of accounting to justify your answer.

3 Accounting elements

To keep track of her business transactions, the owner of Strathmore Appliances borrows a computer from her sister on a regular basis. The computer cost \$5000 two years ago and has recently been valued at \$2800.

- a How should the computer be treated in the books of Strathmore Appliances? Refer to the appropriate definition of the accounting elements to support your answer.
- b Would your answer change if the owner of Strathmore Appliances gave her sister some electrical goods from the business as payment for the use of the computer? Explain your answer fully.
- c Would your answer change if the owner paid her sister \$1800 for the computer? Should the computer be recognised as an asset of the business? If you answered 'yes', at what value should it be recorded: \$5000, \$2800 or \$1800? Justify your answer.



Workbook
p. 2



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Workbook
p. 2



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Workbook
p. 3



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Workbook
p. 4



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4 Accounting elements

The owner of Bateman's Bookstore bought \$500 worth of stationery during the current reporting period. On 30 June 2028, he found that an unopened box of pens, worth \$5, hadn't been used during the period.

- a Should the entire \$500 be reported as an expense in the firm's reports? Refer to the relevant qualitative characteristic in your answer.
- b Would it make any difference to your answer if the value of unused stationery was \$150, rather than \$5? Explain your answer fully.



Workbook
p. 5



XL template

5 Qualitative characteristics and accounting assumptions

Kaylene Biffin, the owner of a small business that sells golf equipment, provides this list of her assets to her accountant at the end of a reporting period:

- Cash \$12 000 (including \$2000 in a personal account)
- Inventory \$42 000 (valued at estimated selling price: the cost price was \$21 000)
- Vehicle \$29 000 (purchased for \$45 000).

Kaylene's accountant advises her that she hasn't followed acceptable accounting assumptions and qualitative characteristics.

State and explain which accounting assumption(s) and/or qualitative characteristic(s) Kaylene hasn't followed correctly.



Workbook
p. 6



XL template

6 Accounting elements

Betty Semini owns a menswear store trading as Classic Styles. She rents her business premises from City Real Estate at a cost of \$40 000 per annum. During recent negotiations, the two firms agreed on a one-off payment of \$99 000 on 1 January 2028 for the use of the property during 2028, 2029 and 2030. Betty believes that the entire \$99 000 should be written off as an expense in 2028, as it represents the loss of economic resources for the year. However, a friend suggests that this would distort the profits of the firm in the following two years.

Discuss both arguments, with reference to the definitions of the five accounting elements and any relevant qualitative characteristics or accounting assumptions.



Workbook
p. 7



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7 Accounting elements and qualitative characteristics

Nick Zaita is the owner of Coburg Smallgoods. During the reporting period ending 31 December 2028, he purchased the following items:

- computer (\$2500)
- printer (\$450)
- stapler (\$10)
- metal ruler (\$4).

Nick estimates that all four items should have a useful life in the business of about three years. However, a friend tells him that all the items are expenses to his business, because they represent an economic sacrifice during 2028.

- a Explain the difference between an asset and an expense.
- b Identify one reason why all four items should be reported as assets as at 31 December 2028.
- c Identify one reason why some of the items should be treated as expenses during 2028.
- d Explain how the qualitative characteristic of relevance may be applied to this situation. Taking this characteristic into account, should any of the four items be treated as expenses for 2028? Explain your answer fully.

8 Qualitative characteristics and accounting assumptions

For each of the following situations, identify the relevant qualitative characteristic(s) and/or accounting assumption(s), and explain how they should be applied.

- a Marcus Gigliotti is the owner of Brunswick Party Hire. On 10 June, he bought 100 chairs costing a total of \$3000. On 15 June, he bought an office desk for the family home at a cost of \$1000.
- b The owner of Melissa's Health Foods calculated the profit of her business in her first year using a one-month reporting period. When she found that this method was taking up too much of her time, she changed to a six-month reporting period. She then got tired of that method and now determines her business's profit every two years.
- c Talia Liberatore hasn't been able to keep accurate files of the documents used by her smartphone retail business. However, she is confident that she can remember the transactions for the last month and prepares an income statement on that basis. She is reasonably confident that her estimate of sales for the month is accurate.
- d Johann Gleeson is the owner of Gleeson's Hardware Warehouse. The business has been struggling lately, and Johann isn't certain that he will continue to operate next year. With this in mind, he has prepared a balance sheet on the basis of what he expects to receive if he decides to sell the firm's assets.
- e Donna Davies doesn't think it's necessary to prepare an income statement and balance sheet every year. She has been in business as Camberwell Camping Gear for three years and has just completed accounting reports for this three-year period showing a profit of \$65 000.

ETHICAL CONSIDERATIONS

Anthony Orlando operates an accounting practice that specialises in providing taxation and business advice to retail traders. His business is located across the road from a major shopping centre where he has several clients, including Lachlan Walsh, the owner of Sunshine Sneakers.

Recently the shopping centre expanded, bringing a number of potential new clients to Orlando's business. Two different business operators, both opening new luxury sneaker stores, approached him for accounting advice. Anthony isn't sure whether he should provide advice to them. He has asked you what you think he should do.

Discuss this ethical issue. Consider both the potential benefits to Orlando's business and its negative aspects. Also provide a conclusion, including your recommendation to Orlando.

Exam tips

To help remember the four accounting assumptions and the six qualitative characteristics of accounting, try using the acronyms **PAGE** and **TURF-CV**:

ASSUMPTIONS

Period assumption
Accrual basis assumption
Going concern assumption
Entity assumption

QUALITATIVE CHARACTERISTICS (QCs)

Timeliness
Understandability
Relevance
Faithful representation
Comparability
Verifiability



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p. 8



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EXAM-STYLE QUESTIONS

Question 1 (5 marks)

Ryan Leahy, the owner of North Melbourne Computers, removed a laptop from his shop's display and took it home for personal use. He hasn't recorded this event in the books of the business.

- a** Complete the following table to show the effect on the accounting equation, given that the withdrawal of the inventory hasn't been recorded. (3 marks)

	Understated/Overstated/No effect
Assets	
Liabilities	
Owner's equity	

- b** State the accounting assumption that requires the withdrawal of inventory to be recorded in the books of North Melbourne Computers. Justify your answer. (2 marks)

Question 2 (2 marks)

Explain why 'inventory' isn't recognised as an expense item for a trading business.

Question 3 (2 marks)

During the year, a business owner has recorded cash sales of \$80 000 and credit sales of \$120 000. The owner is unsure of how much revenue to report for the period. Calculate the amount of revenue that should be reported. Justify your answer with reference to an accounting assumption.

Question 4 (2 marks)

Explain why accountants classify assets and liabilities into current and non-current items. In your answer, refer to a qualitative characteristic that supports your explanation.

Question 5 (2 marks)

Explain how a loan can be reported as both a current liability and a non-current liability.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Balance sheets

KEY TERMS

Balance sheet
Capital
Interest-only loan
Instalment loan
GST liability
GST refund

This chapter focuses on the preparation of the balance sheet, which shows the financial position of a business at a point in time. Financial position involves the consideration of assets, liabilities and owner's equity.

Learning objectives

By the end of this chapter, you will be able to:

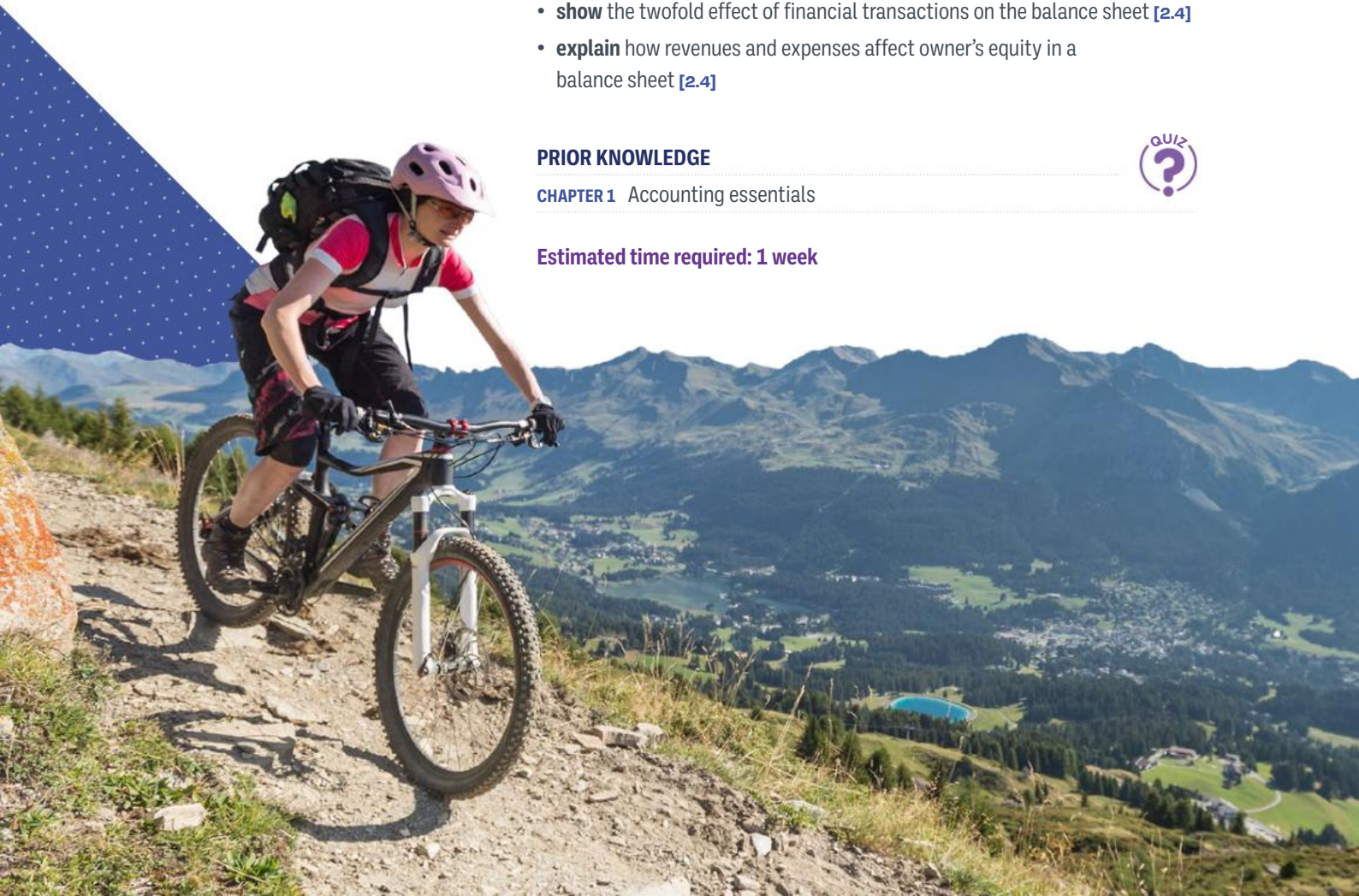
- **explain** the purpose of a balance sheet [2.1]
- **explain** the concept of net worth [2.1]
- **prepare** a balance sheet for a small business in both T-form and narrative form [2.1]
- **prepare** a classified balance sheet using appropriate headings [2.2]
- **explain** the difference between interest-only loans and instalment loans [2.3]
- **show** the twofold effect of financial transactions on the balance sheet [2.4]
- **explain** how revenues and expenses affect owner's equity in a balance sheet [2.4]

PRIOR KNOWLEDGE

CHAPTER 1 Accounting essentials



Estimated time required: 1 week





2.1 Balance sheets

balance sheet an accounting report that states the financial position of a business at a particular point in time

capital assets a person invests in a business

The **balance sheet** is prepared at the end of every reporting period. A balance sheet has three main sections.

- **Assets:** The economic resources controlled by an entity as a result of past events. These resources have the potential to produce future economic benefits.
- **Liabilities:** The present obligations of an entity to transfer economic resources as a result of past events.
- **Owner's equity:** The residual value of the assets of an entity after its liabilities are deducted. This is also referred to as the net worth of the business. The owner's equity usually consists of the **capital** contributed by the owner, plus any profits earned by the firm that haven't yet been distributed.

As you learnt in Chapter 1, the accounting equation connects these three concepts and is the basis of all balance sheets. It states:

$$\begin{aligned}\text{Assets} &= \text{liabilities} + \text{owner's equity} \\ A &= L + OE\end{aligned}$$

To highlight the net worth of a business, it can be expressed as:

$$\begin{aligned}\text{Owner's equity} &= \text{assets} - \text{liabilities} \\ OE &= A - L\end{aligned}$$

A balance sheet can be presented using a T-form style or a narrative style.

T-form reports

Figure 2.1 shows the balance sheet in a T-form presentation (across the page).

Figure 2.1 Balance sheet: T-form presentation

CITY CYCLES: BALANCE SHEET AS AT 30 JUNE 2028

Assets	\$	Liabilities	\$	\$
Cash at bank	3 000	GST clearing	1 000	
Accounts receivable	15 000	Accounts payable	14 000	
Inventory	50 000	Loan (due 30/6/30)	30 000	45 000
Office equipment	14 000	Owner's equity		
Vehicles	68 000	Capital – Ebony Rae		105 000
Total assets	150 000	Total equities		150 000

These items are the economic resources under the control of this business.

This is a list of the business's present obligations.

The accounting equation in this balance sheet is:

$$\text{Assets } \$150\,000 = \text{liabilities } \$45\,000 + \text{owner's equity } \$105\,000$$

Equities are any legal claim on the assets of the business. Liabilities include all external equities, as these are obligations of the business to outsiders. The internal equity is the owner's claim on the firm. In the City Cycles example, this is the net worth of the business to the owner, Ebony Rae.

Narrative reports

A T-form balance sheet can be redrafted into a narrative format. The narrative format is set out vertically, down the page.

A narrative statement can be prepared in two different styles. The first style shows the assets of the firm in the top half of the report, and liabilities and owner's equity in the bottom half. Figure 2.2 presents the same City Cycles information as in Figure 2.1, but in this standard narrative format.

Figure 2.2 Balance sheet: Standard narrative presentation

CITY CYCLES: BALANCE SHEET AS AT 30 JUNE 2028		
	\$	\$
Assets		
Cash at bank		3 000
Accounts receivable		15 000
Inventory		50 000
Office equipment		14 000
Vehicles		68 000
Total assets		150 000
Liabilities		
GST clearing	1 000	
Accounts payable	14 000	
Loan (due 30/6/30)	30 000	45 000
Owner's equity		
Capital – Ebony Rae		105 000
Total equities		150 000

Although narrative balance sheets follow an acceptable format, the T-form balance sheet is the preferred format for the VCE.

A second style of narrative report highlights the net worth of the business. Many company reports use this style of presentation, and it has additional value when preparing a classified report (page 22). This statement uses the accounting equation of $OE = A - L$. Figure 2.3 shows the City Cycles report in this format style.

Figure 2.3 Narrative-form balance sheet highlighting owner's equity

CITY CYCLES: BALANCE SHEET AS AT 30 JUNE 2028		
	\$	\$
Owner's equity		
Capital – Ebony Rae		105 000
<i>Is represented by:</i>		
Assets		
Cash at bank	3 000	
Accounts receivable	15 000	
Inventory	50 000	
Office equipment	14 000	
Vehicles	68 000	150 000
Less: Liabilities		
GST clearing	1 000	
Accounts payable	14 000	
Loan (due 30/6/30)	30 000	45 000
Net assets		105 000

City Cycle's inventory would consist of bikes, bike tools and other equipment, and spare parts.



In this style of narrative report, the owner's equity figure is shown as being equal to the net assets of the business. The value of the net assets is calculated by subtracting the total liabilities from the total assets. T-form and narrative-form balance sheets show exactly the same information. They differ only in the way they are presented.



2.2 Classifying balance sheets

To provide more information about a business, a balance sheet can be classified to include groups of similar items. *Assets* are usually classified according to their liquidity – that is, how quickly they can be turned into cash or used up. *Liabilities* are classified according to how urgently they need to be repaid. The following classifications are usually used in a balance sheet:

- **Current assets:** These are cash and other economic resources usually held for the purpose of sale or trading. They are reasonably expected or intended to be converted into cash, or sold, or consumed by a business within 12 months from the end of the reporting period. Current assets include cash on hand, cash at bank, short-term investments, inventory (goods held for resale), materials or supplies (e.g. stationery), and accounts receivable (amounts owing by credit customers).
- **Non-current assets:** These are longer-term assets. They are usually acquired with the intention of using them for a number of years and are not held for resale. Typical non-current assets are computers, vehicles, machinery, furniture, equipment, property and long-term investments.
- **Current liabilities:** These are liabilities that are reasonably expected to be settled within 12 months from the end of the reporting period. They include items such as bank overdrafts, short-term loans, and amounts owing to suppliers who have extended credit to the business (usually referred to as accounts payable).
- **Non-current liabilities:** These are the longer-term obligations of the business, which don't need to be fully settled within 12 months. They are also known as deferred liabilities and include debts for which the payment will extend over a period greater than 12 months (e.g. mortgage loans).

Even though a loan may be taken out over 10 years, the amount due within the following 12 months is still a current liability. The amount to be repaid over the remaining nine years is a non-current liability.

Figure 2.4 shows a redrafted T-form balance sheet that uses these headings to classify City Cycles' assets and liabilities.

Figure 2.4 Classified balance sheet (T-form)

CITY CYCLES: BALANCE SHEET AS AT 30 JUNE 2028					
Assets	\$	\$	Liabilities	\$	\$
Current assets			Current liabilities		
Cash at bank	3 000		GST clearing	1 000	
Accounts receivable	15 000		Accounts payable	14 000	
Inventory	50 000	68 000	Loan	15 000	30 000
Non-current assets			Non-current liabilities		
Office equipment	14 000		Loan (due 30/6/30)		15 000
Vehicles	68 000	82 000	Owner's equity		
			Capital – Ebony Rae		105 000
Total assets		150 000	Total equities		150 000

You can see that City Cycles needs to repay a loan, which has been divided into two parts. The loan is due over the next two years, with \$15 000 due within the next 12 months and the remaining \$15 000 due the following year.

Classified statements can also be prepared using either of the two narrative formats, as shown in Figures 2.5 and 2.6.

Figure 2.5 Classified balance sheet (standard narrative format)

CITY CYCLES: BALANCE SHEET AS AT 30 JUNE 2028		
	\$	\$
Current assets		
Cash at bank	3 000	
Accounts receivable	15 000	
Inventory	50 000	68 000
Non-current assets		
Office equipment	14 000	
Vehicles	68 000	82 000
Total assets		150 000
Current liabilities		
GST clearing	1 000	
Accounts payable	14 000	
Loan	15 000	30 000
Non-current liabilities		
Loan (due 30/6/30)		15 000
Owner's equity		
Capital – Ebony Rae		105 000
Total equities		150 000

Figure 2.6 Classified balance sheet (narrative highlighting owner's equity)

CITY CYCLES: BALANCE SHEET AS AT 30 JUNE 2028		
Owner's equity	\$	\$
Capital – Ebony Rae		105 000
<i>Is represented by:</i>		
Current assets		
Cash at bank	3 000	
Accounts receivable	15 000	
Inventory	50 000	68 000
Current liabilities		
GST clearing	1 000	
Accounts payable	14 000	
Loan	15 000	30 000
Working capital*		38 000
Non-current assets		
Office equipment	14 000	
Vehicles	68 000	82 000
		120 000
Less: Non-current liabilities		
Loan (due 30/6/30)		15 000
Net assets		105 000

*The value of current assets minus current liabilities (i.e. the liquid funds a business uses in its day-to-day trading operations).

Classified balance sheets provide more information than unclassified forms. The longer-term assets are grouped together. The firm's liquid assets and short-term obligations are also clearly identified. These groupings can be used as analytical tools when examining a business.

EXAM-STYLE QUESTION

Explain why shop fittings should be classified as a non-current asset when preparing a balance sheet for a business. (2 marks)

Sample answer

Shop fittings are usually purchased as a long-term asset and are used to help a business generate its revenue. They are therefore an economic resource controlled by the business entity and are expected to generate future economic benefits over several years. As they aren't expected to be used up or sold within 12 months, they should be classified as a non-current asset and not as a current asset.

Exam advice

Explain-type questions feature prominently in many VCE Accounting exams and are usually allocated 2 marks. Always make two distinct points when preparing your response. In the example above, it would be important to mention the '12-month rule' as you are referring to a non-current asset. It is also important that your response demonstrates your knowledge of the definitions of the elements of accounting by distinguishing between a *non-current asset* and a *current asset*.

Don't avoid using technical language in your responses to theory-type questions. Use the expression 'economic resources controlled by the business', not 'things owned by the business'. Also: 'assets are expected to generate future economic benefits', not 'assets make money for a business'. You are more likely to be awarded marks if you use technical accounting language, not everyday language.

2.3 Classifying loans



When loans are included in a balance sheet, they can be classified in a number of ways. Figure 2.4 (page 21) showed how a two-year loan may be reported as both a current and a non-current liability, with half of the loan being shown under each heading. The way a business owner treats a liability depends on the type of loan.

There are two basic ways a business may borrow money: interest-only loans and instalment loans.

Interest-only loans

Interest-only loans don't require the borrower to repay the amount borrowed (the principal) until the loan period has expired. Until then, the borrower only has to pay the interest due to the lender each year. Interest-only loans are classified as non-current liabilities in balance sheets until the date when the principal has to be repaid is within 12 months of the balance sheet date.

interest-only loan a loan that only requires payment of interest during its life, with the amount borrowed repaid in one lump sum at the end

EXAMPLE 2.1

On 1 December 2028, Nadim's Halal Foods borrows \$40 000 as an interest-only loan over five years at 10% per annum interest. Over the course of the loan, the business only needs to pay the interest of \$4000 (10% of \$40 000) each year. None of the principal (the original \$40 000 borrowed) needs to be repaid until the five years have passed (30 November 2033).

This type of loan has advantages for a business, as it gives the owner time to accumulate the amount needed to make a single repayment of the principal. However, it requires excellent planning skills, because the total amount borrowed has to be available on the day the loan period expires. Interest-only loans are classified as non-current liabilities until the loan becomes due for payment within the next year. At this time, the loan is reported as a current liability.

Nadim's Halal Foods would report the \$40 000 as a non-current liability for the first four years that the business has the loan. Its reporting period ends on 31 December each year, so the loan is reported under the non-current liability heading at the end of 2028, 2029, 2030, 2031 and 2032.

When Nadim's balance sheet is prepared on 31 December 2032, however, the loan will be due in only 11 months (on 30 November 2033). For this balance sheet, the loan is reported as a current liability because it will need to be repaid within 12 months of the current reporting period.

When classifying an interest-only loan in a balance sheet, always check the date when the principal has to be repaid.

Instalment loans

Instalment loans require the borrower to make scheduled repayments of both principal and interest throughout the life of the loan. These instalments are usually stated as a dollar amount, paid per month or per quarter. This allows a business owner to avoid having to make one lump sum payment, as is required when the principal is repaid under interest-only loans. However, as instalment loans must be repaid constantly throughout the loan period, owners must have enough cash available each month to meet the repayment. This may put a business under steady pressure for several reporting periods.

instalment loan a loan that requires scheduled repayments of both principal and interest throughout its life

EXAMPLE 2.2

On 31 December 2028, Essendon Books borrowed \$50 000 from the bank on a five-year loan. The loan involves equal repayments over the five years, so the business must repay one-fifth of the \$50 000 in the next 12 months. The balance sheet reflects this by reporting \$10 000 as a current liability, with the remaining \$40 000 as a non-current liability.

ESSENDON BOOKS: BALANCE SHEET (EXTRACT) AS AT 31 DECEMBER 2028

Current liabilities		
Bank loan	10 000	
Non-current liabilities		
Bank loan	40 000	50 000

Always include the amount owing in the next 12 months under the heading of 'Current liabilities'.

One year later, the situation would be:

ESSENDON BOOKS: BALANCE SHEET (EXTRACT) AS AT 31 DECEMBER 2029

Current liabilities		
Bank loan	10 000	
Non-current liabilities		
Bank loan	30 000	40 000

As a full year has passed, one-fifth of the loan has been repaid. The business now owes \$40 000 in total to the bank.

Once again, the owner has an obligation due within the next 12 months (another \$10 000), which is reported as a current liability.

The non-current liability will be reduced by \$10 000 each year until only \$10 000 is left unpaid. When this occurs, the remaining \$10 000 amount will be reported as a current liability.

The loan calculations in these examples only relate to the repayment of the principal amount borrowed. The payment of interest on loans is treated separately because interest payments represent the cost of borrowing money. Interest is reported as an expense item in each reporting period that the loan exists.

EXAM-STYLE QUESTION

A business borrowed \$200 000 from National Australia Bank a few years ago. On 30 June 2028, the amount owing on this loan was \$150 000. Quarterly payments of \$8000 are expected to be made in the future. **Explain** how this loan should be reported in the balance sheet prepared on 30 June 2028. (2 marks)

Sample answer

As quarterly payments of \$8000 are expected, \$32 000 would be due for repayment within the next 12 months. Therefore, \$32 000 should be reported as a current liability. As \$150 000 is the total amount still owing, the rest of the loan, which would be \$118 000, should be reported as a non-current liability as it is due for repayment over a period greater than 12 months.





Exam advice

In order to gain full marks, this question required a written response but also involved some calculations. As the question provided the value of a quarterly repayment, the given value can simply be multiplied by 4 to determine the amount due within the next 12 months (1 mark). This amount must be reported as a current liability. The second mark would then be awarded for the treatment of the remainder of the loan, which was \$118 000 (\$150 000 – \$32 000 = \$118 000).

When classifying loans in a balance sheet, always check for information about how repayments are being made. This will help you to determine the value of the current liability obligation. It may be expressed as payments per week, per month or even per quarter. Make sure you determine the amount to be paid in the next 12 months.

Don't take shortcuts! This question is an *Explain*-type question. As it involved some practical calculations, some students might simply write: 'CL \$32 000, NCL \$118 000.' Even though these calculations are correct, they *haven't explained* anything, so this type of response would *not* be awarded full marks.

2.4 Financial transactions and balance sheets



The balance sheet reports the values of assets, liabilities and owner's equity at a given date. These three main groups make up the basic accounting equation.

As you learnt in Chapter 1, two other elements of accounting are also affected by transactions:

- **Revenues:** Revenues usually arise through the provision of services or the sale of goods (e.g. charter fees for a bus company, ticket sales for a cinema, cash or credit sales of inventory by a trading firm, and interest on investments).
- **Expenses:** Expenses include such items as wages, advertising, rent, insurance, depreciation of non-current assets and the cost price of inventory sold.

Under the *accrual basis assumption* (see Chapter 1, page 10), profit is determined for a period using the formula of revenue earned less expenses incurred. All of the revenue and expense items relating to a particular reporting period are shown in an accounting report known as an *income statement*. The net profit or loss is then added to or subtracted from the owner's equity in the balance sheet.

Income statements will be covered in detail in Chapter 11. At this stage, it is important to understand that revenues increase owner's equity, while expenses decrease it.



Every financial transaction will affect at least two items in the balance sheet.

The twofold effect of transactions

Every financial transaction of a business will affect at least two items in its balance sheet. This 'twofold' effect of transactions is the basis of double entry accounting. Figure 2.7 demonstrates how individual transactions have a twofold effect on the balance sheet of a small business.

In addition, transactions that attract the Goods and Services Tax have to be reported in the balance sheet. When GST is collected by a business, it increases the liability it owes to the government. If a business pays GST on items it purchases, this decreases its **GST liability** or may even create an asset (if the business is owed a **GST refund**). Therefore, a GST liability will exist if the business has collected (or charged) more GST than it has paid, while a GST refund will exist if a business has paid (or been charged) more GST than it has collected.

GST liability an obligation to the ATO because the business has collected (or charged) more GST than it has paid

GST refund an amount owed by the ATO because the business has paid (or been charged) more GST than it has collected

Figure 2.7 The twofold effect of transactions on the balance sheet

Transaction	First effect	Second effect
1 Owner deposited \$200 000 cash to commence business	Increase Cash at Bank account (asset) by \$200 000	Increase Capital account (owner's equity) by \$200 000
2 Took out an interest-only loan of \$60 000	Increase Cash at Bank account (asset) by \$60 000	Increase Loan account (liability) by \$60 000
3 Bought shop fittings for \$20 000 cash, plus GST of \$2000	Increase Shop Fittings account (asset) by \$20 000 Decrease GST Liability account by \$2000	Decrease Cash at Bank account (asset) by \$22 000
4 Purchased inventory on credit for \$25 000, plus GST of \$2500	Increase Inventory account (asset) by \$25 000 Decrease GST Liability account by \$2500	Increase Accounts Payable account (liability) by \$27 500
5 Sold goods for \$3000 cash, plus GST of \$300 (cost price of goods sold \$1000)	1 Increase Cash at Bank account (asset) by \$3300 and decrease Inventory account (asset) by \$1000 2 Total overall increase in assets \$2300	3 Increase GST Liability account by \$300 4 Increase Capital account (owner's equity) by \$2000 5 Revenue \$3000 less expense \$1000 = \$2000 profit Total increase \$2300
6 Paid wages for the week of \$1000	Decrease Cash at Bank account (asset) by \$1000	Decrease Capital account (owner's equity) by \$1000, as wages are an expense

Regardless of the nature of the transactions, there will *always* be at least two items affected in the firm's balance sheet. For example, item 5 in Figure 2.7 shows what happens to the report when goods are sold for cash:

- 1 One asset increases (Cash at Bank by \$3300), while a second asset decreases (Inventory by \$1000).
- 2 The net effect of this transaction is a total overall increase in assets of \$2300.
- 3 The GST Liability account increases by \$300, because the business collected \$300 GST on its sale on behalf of the government.
- 4 Owner's equity also increases by \$2000, because this is the actual profit made on the sale of the goods. This figure represents the net gain made on the sale.
- 5 The inventory sold cost \$1000 and was sold for \$3000, so the owner ultimately experiences a \$2000 increase in net worth as \$2000 profit was made on this sale of goods.

Similarly, in item 6, which involves the payment of an expense, both the Cash at Bank account and the owner's equity experience a decrease of \$1000. Always keep in mind that revenue items increase an owner's equity, while expense items decrease it.

Transaction worksheets

A second way to show the effect of transactions on the balance sheet is to use a worksheet. The worksheet is based on the accounting equation, with assets on the left side and liabilities and owner's equity on the right side.

The worksheet in Figure 2.8 includes the same transactions as in Figure 2.7, but this time each item in the balance sheet is changed as the transactions are considered.

Figure 2.8 Worksheet approach

Transactions	Assets			Liabilities			Owner's equity
	Cash at bank \$	Inventory \$	Shop fittings \$	GST clearing \$	Accounts payable \$	Loan \$	Capital \$
1 Owner deposited \$200 000 cash to commence business	+200 000						+200 000
2 Took out an interest-only \$60 000 loan	+60 000					+60 000	
3 Bought shop fittings for \$20 000 cash, plus GST of \$2000	-22 000		+20 000	-2 000			
4 Purchased inventory on credit for \$25 000, plus GST of \$2500		+25 000		-2 500	+27 500		
5 Sold goods for \$3000 cash, plus GST of \$300 (cost price of goods sold \$1000)	+3 300	-1 000		+300			+3 000 -1 000 = +2 000
6 Paid wages for the week of \$1000	-1 000						-1 000
Overall result	240 300	24 000	20 000	(4 200)	27 500	60 000	201 000

The final results of the transactions may then be reported in a formal balance sheet, using the accounting equation of assets = liabilities + owner's equity.

BALANCE SHEET				
Assets	\$	Liabilities	\$	\$
Cash at bank	240 300	Accounts payable	27 500	
GST clearing	4 200	Loan from bank	60 000	87 500
Inventory	24 000	Owner's equity		
Shop fittings	20 000	Capital		201 000
	288 500			288 500

In relation to the GST, note that the balance of \$4200 has been reported as an asset (GST Clearing). At this point in time, the business has paid \$4200 more in GST than it has collected. Some accounting software may report this as a negative amount in the current liabilities section of a balance sheet. However, this figure represents a future benefit to the business (a GST refund), so it should be reported as a current asset.

While this example shows how transactions have a twofold effect on the balance sheet, it isn't practical for real businesses to draw up tables like Figure 2.7 to record transactions. Later chapters show accounting procedures that real businesses use. However, such procedures are still based on the principle that every transaction has a twofold effect on the balance sheet, whatever the size of the business.

Preparing balance sheets after every transaction

A second approach is the preparation of a balance sheet after every transaction. Again, accountants don't record transactions this way in practice, but it's a useful way to learn about how transactions affect a business's accounting equation.

The following transactions relate to Cammerino's Carpets. After each transaction, a new balance sheet has been prepared to show the business's current financial situation.

Jul 1 James Cammerino deposited \$300 000 to commence business

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 1 JULY 2028

Assets	\$	Owner's equity	\$
Cash at bank	300 000	Capital	300 000
	300 000		300 000

Balance sheet changes:

- increase in Cash at Bank (asset) of \$300 000
- increase in Capital (owner's equity) of \$300 000.

Jul 2 Purchased inventory for the business for cash at a cost of \$30 000, plus GST of \$3000

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 2 JULY 2028

Assets	\$	Owner's equity	\$
Cash at bank	267 000	Capital	300 000
Inventory	30 000		
GST clearing	3 000		
	300 000		300 000

Balance sheet changes:

- Cash at Bank (asset) decreases by \$33 000
- Inventory (asset) increases by \$30 000
- the business is owed \$3000 for the balance of its GST account.

Jul 3 Took out a loan from CommBank for \$30 000 to assist with the purchase of a new vehicle.

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 3 JULY 2028

Assets	\$	Liabilities	\$
Cash at bank	297 000	Loan – Commbank	30 000
Inventory	30 000	Owner's equity	
GST clearing	3 000	Capital	300 000
	330 000		330 000

Jul 4 Purchased a vehicle for the business at a cost of \$40 000 cash, plus \$4000 GST

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 4 JULY 2028

Assets	\$	Liabilities	\$
Cash at bank	253 000	Loan – Commbank	30 000
Inventory	30 000		
GST clearing	7 000	Owner's equity	
Vehicle	40 000	Capital	300 000
	330 000		330 000

Balance sheet changes:

- Cash at Bank (asset) decreases by \$44 000
- the business is now owed \$7000 by the ATO for the GST paid
- Vehicle (asset) increases by \$40 000.

Jul 5 Paid for advertising \$3000 and insurance \$2000 (plus GST of \$300 and \$200, respectively)

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 5 JULY 2028

Assets	\$	Liabilities	\$
Cash at bank	247 500	Loan – Commbank	30 000
Inventory	30 000	Owner's equity	
GST clearing	7 500	Capital	295 000
Vehicle	40 000		
	325 000		325 000

Balance sheet changes:

- Cash at Bank (asset) decreases by \$5500
- GST clearing goes up by \$500 (as these expenses attracted GST)
- Capital (owner's equity) decreases by \$5000.

Jul 6 Sold goods that cost \$4000 for \$10 000 cash, plus GST of \$1000

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 6 JULY 2028

Assets	\$	Liabilities	\$
Cash at bank	258 500	Loan – Commbank	30 000
Inventory	26 000	Owner's equity	
GST clearing	6 500	Capital	301 000
Vehicle	40 000		
	331 000		331 000

Balance sheet changes:

- \$4000 worth of goods were sold, so Inventory (asset) decreases by \$4000
- Cash at Bank (asset) increases by \$11 000 (including GST)
- Capital increases by \$6000, representing the profit made on the sale (\$10 000 – \$4000 = \$6000)
- GST Clearing (asset) goes down by \$1000 as the business collected this amount of GST.

Note the change in GST Clearing. The business previously paid \$7500 GST but has now collected \$1000 GST on its sales. This GST has been deducted from the GST it paid previously, meaning that the government now owes the business a GST refund of \$6500.

Jul 7 Paid \$1000 off the loan from Commbank

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 7 JULY 2028

Assets	\$	Liabilities	\$
Cash at bank	257 500	Loan – Commbank	29 000
Inventory	26 000	Owner's equity	
GST clearing	6 500	Capital	301 000
Vehicle	40 000		
	330 000		330 000

Balance sheet changes:

- Cash at Bank (asset) decreases by \$1000
- Loan – Commbank decreases by \$1000 and reduces the loan to \$29 000.

Jul 8 Sold goods on credit for \$10 000, plus GST of \$1000 (cost price of inventory sold \$5000)

CAMMERINO'S CARPETS: BALANCE SHEET AS AT 6 JULY 2028

Assets	\$	Liabilities	\$
Cash at bank	257 500	Loan – Commbank	29 000
Inventory	21 000		
GST clearing	5 500	Owner's equity	
Accounts receivable	11 000	Capital	306 000
Vehicle	40 000		
	335 000		335 000

This transaction is similar to the cash sale example except that, instead of Cash at Bank increasing, an accounts receivable asset is created.

Balance sheet changes:

- Accounts Receivable increases by \$11 000 (sale of \$10 000, plus GST of \$1000)
- GST Clearing decreases by \$1000
- Inventory (asset) decreases by \$5000
- Owner's equity increases by \$5000 (\$10 000 – \$5000 = \$5000 profit).



Daily sales are usually recorded as a single large transaction, rather than multiple small transactions. This is particularly important in businesses with numerous sales every day.

As you can see, *every* financial transaction affects the balance sheet of a business in at least two ways. Revenue earned increases the owner's claim on the firm, while expenses incurred decrease the owner's equity.

Regardless of the nature of the transaction, the accounting equation must always hold true: assets must always equal liabilities plus owner's equity.

Individual or summary accounts?

If a business only has a few suppliers providing inventory on credit, it may maintain individual accounts payable in the general ledger. At the end of the period, the individual accounts may also be shown in the balance sheet. However, if a business has numerous accounts payable, it may just provide a summary figure and a total amount.

Similarly, if a business provides goods on credit, entries may be required in multiple ledger accounts for each individual account receivable. Each individual customer may also be listed in the balance sheet to provide relevant information. However, if a business has many credit customers, this may clutter up the balance sheet with unnecessary detail. It may be sufficient instead just to show a total of the amount owing by credit customers.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [2.1]** A balance sheet shows the financial position of a business at a particular point in time. It provides information on assets, liabilities and owner's equity, reflecting the accounting equation: $A = L + OE$ (or $OE = A - L$).
- [2.1]** Balance sheets can be created in a T-form style or a narrative style. Narrative reports show the same information as T-form reports but may be easier to understand.
- [2.2]** A balance sheet can provide more information about a business by including groups of similar items under headings. Typical headings include:
- current assets
 - non-current assets
 - current liabilities
 - non-current liabilities.
- [2.3]** A business may borrow money in the form of an interest-only loan or an instalment loan. For an interest-only loan, the borrower repays the principal of the loan when the loan period has expired. For an instalment loan, the borrower makes scheduled repayments of the principal throughout the life of the loan.
- [2.4]** Transactions such as revenues and expenses aren't reported directly in a balance sheet. However, they affect the value of assets, liabilities and owner's equity, which are reported.
- [2.4]** All transactions will affect at least two items in a business's balance sheet. This 'twofold' effect of transactions is the basis of double entry accounting.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Classifying balance sheet items

The following items relate to the business Galaxy Games. For each item, state whether it would appear in a balance sheet (under the heading 'Current assets', 'Non-current assets', 'Current liabilities', 'Non-current liabilities' or 'Owner's equity') or whether it is irrelevant.

- a Office furniture
- b Cash on hand
- c Office equipment
- d Inventory of games
- e Land and buildings
- f Display cabinets
- g Owner's personal vehicle
- h Amounts owing to suppliers of toys and games

2 Classifying balance sheet items

Classify the following items by their balance sheet category (or state 'irrelevant').

- a Bank overdraft
- b Amounts owing by credit customers
- c GST refund due from the ATO
- d GST owing to the ATO
- e 12-month loan
- f Mortgage loan
- g Two-year term deposit made in the business name
- h Three-year loan taken out by the owner's husband
- i Amount invested by the owner to commence business

3 Preparing balance sheets

The owner of Central Office Supplies, Oliver Barry, has provided the following information concerning his business as at 30 September 2028.

- Cash on hand: \$200
 - Inventory: \$56 000
 - Cash at bank: \$3200
 - Amounts owing by credit customers (accounts receivable): \$4400
 - Vehicle: \$48 000
 - Amounts owing to suppliers (accounts payable): \$3300
 - GST liability: \$300
 - Loan from National Australia Bank (due 31/8/29): \$22 000
- a Prepare a classified balance sheet as at 30 September 2028.
 - b State the accounting equation of the firm as at 30 September 2028.



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4 Preparing balance sheets

The following information is supplied by Steph Serafidis, the owner of Vintage Vinyl, on 31 August 2028.

- Cash on hand: \$500
- Bank overdraft: \$1000
- Business premises: \$720 000
- Accounts payable: \$6500
- Inventory: \$59 700
- Accounts receivable: \$4480
- Office furniture and fittings: \$12 000
- Vehicles – business: \$31 000; private: \$28 000
- Interest-only loan (due 2034): \$180 000
- Personal home loan: \$234 000
- Loan for business vehicle: \$8000 (repayable over next two years)
- GST liability: \$2400

- a Using the relevant information from the items listed, prepare a classified balance sheet for Vintage Vinyl as at 31 August 2028.
- b Explain your treatment of the following items:
 - i vehicle – private
 - ii personal home loan.

Refer to the relevant qualitative characteristic and/or accounting assumption in your answer.

- c State the accounting equation in the balance sheet in part a, clearly showing the net worth of the business to the owner.



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5 Preparing balance sheets

The following financial items relate to Cicconi's Car Yard, a business that sells quality used cars.

- Cleaning equipment: \$5800
- Cash at bank: \$1000
- Office furniture: \$5800
- Starting capital contributed by Daniel Cicconi: \$340 000
- Accounts payable – Deluxe Car Auctions: \$129 000
- Office equipment: \$4900
- Inventory of cars: \$582 000
- Accounts receivable: \$109 500
- Loan from National Australia Bank (due 15/7/29): \$15 000
- Land and buildings: \$895 000
- Mortgage loan on premises: \$375 000 (repayable \$1600 per month)
- GST paid: \$10 240
- GST collected: \$15 440

Additional information:

- The owner says that he has earned a profit in the two years the business has been operating, and that these amounts have been retained within the business. The actual amount of these profits isn't known. He has asked for your assistance in determining their value.
- A friend of the owner recently offered him \$3500 for the firm's office equipment.
- The owner plans to buy a computer for the business in October 2028 for \$2000.

- a Prepare a classified balance sheet for Cicconi's Car Yard as at 30 September 2028.
- b Explain your treatment of each of the additional information items. Refer to any relevant qualitative characteristics or accounting assumptions in your answer.

6 The twofold effect of transactions

Jack Rio set up his small business, Jack's Cabinets, on 1 March 2028. During the first week, he had the following business transactions:

Mar	1	The owner deposited \$375 000 cash to start the business
	2	Bought an office desk for \$2000 cash, plus GST of \$200
	3	Purchased inventory for \$10 000 cash, plus GST of \$1000
	4	Bought an office computer for \$5000 cash, plus GST of \$500
	5	Sold goods that had cost \$4500 for \$8500 cash, plus GST of \$850
	6	Paid for advertising \$1000, plus GST of \$100

Prepare a table to show the twofold effect of each of these six transactions.

Hint

Use the format shown in Figure 2.7.

7 The twofold effect of transactions

The following information comes from the books of Smartphone Select:

May	1	The owner, Alice Dobson, contributed cash of \$95 000, inventory of \$15 000 and a vehicle valued at \$25 000 to the business
	2	Sold inventory for cash \$9000, plus GST of \$900 (cost price \$4000)
	3	Bought laptop computer for \$2200 cash (including GST)
	4	Sold goods on credit to S Catania for \$2000, plus GST of \$200 (cost price \$800)
	5	Paid wages for week \$500
	6	Purchased more inventory on credit from Android Direct \$3000, plus GST
	7	The owner withdrew \$1000 from the business for personal use
	8	Paid advertising of \$100, plus GST of \$10
	10	Received cash from S Catania \$1200

- a Prepare a worksheet to show the twofold effect of the listed transactions for the period 1–10 May. Follow the format shown in Figure 2.8 and use the following headings:

Assets: Cash at Bank, Inventory, Accounts Receivable, Vehicle, Laptop Computer

Liabilities: GST, Accounts Payable

Owner's equity: Capital

- b Prepare a balance sheet as at 9 May 2028.

8 Transactions and the balance sheet

The following transactions relate to Aberfeldie Camera Supplies. After each transaction, prepare a new balance sheet for the business and state the accounting equation as at that date.

2028		
Apr	1	Bought inventory costing \$8000, plus 10% GST, for cash
	2	Sold inventory for cash \$9000, plus GST of \$900 (cost price \$4000)
	3	Purchased shop fittings for cash \$16 000, plus GST of \$1600
	4	The owner contributed a personal computer valued at \$1500 to the business
	5	Borrowed \$6000 over three years from NAB
	6	Paid wages of \$800
	7	Sold goods that had cost \$1500 for \$3000 cash, plus GST of \$300



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9 Preparing balance sheets

Emily Paul is the owner of Kennels & Cages, a small business that specialises in homes for pets. After each of the following transactions, prepare a new balance sheet for the business.

2028

May	1	Emily contributed \$120 000 cash and \$3000 worth of equipment to start her business
	2	Paid first week's rent of business premises \$1000, plus \$100 GST
	3	Purchased inventory of kennels for \$3600 cash, plus GST of \$360
	4	Purchased inventory of cages for \$4400 on credit, plus GST of \$440
	5	Sold a kennel for \$1500 cash, plus GST of \$150 (cost price \$700)
	6	Paid for advertising \$300, plus GST of \$30
	7	Bought a vehicle for \$14 000, plus GST of \$1400, paying \$4000 cash, with the balance funded by a loan from CAG Finance Co.
	8	Emily withdrew \$500 for personal use
	9	Sold a kennel for \$1800, plus GST of \$180, on credit (cost price \$800)
	10	Paid accounts payable \$2000



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10 Preparing balance sheets

The following balance sheet and financial transactions relate to Total Turntables. The business has an overdraft facility with the local bank.

TOTAL TURNTABLES: BALANCE SHEET AS AT 31 JULY 2028

Assets	\$	Liabilities	\$	\$
Cash on hand	500	GST clearing	1 000	
Cash at bank	1 100	Accounts payable	2 400	
Accounts receivable	2 800	Loan – NAB	2 000	
Inventory	72 500	Loan – EZ Finance	8 000	13 400
Office equipment	14 000			
		Owner's equity		
		Capital – A Taranto		77 500
	90 900			90 900

- Payments to Accounts Payable were \$900.
- Two new turntable sets were purchased on credit at a cost of \$1200 each (plus 10% GST) – these were added to the firm's inventory.
- Cash collected from Accounts Receivable \$1500.
- A new printer was purchased for the office for \$900 cash, plus GST of \$90.
- Sales earned for the month totalled \$8000, plus GST of \$800, consisting of \$3300 received in cash and \$5500 to be received during September. (The cost of sales for the month totalled \$4000.)
- \$1000 was paid off the loan from EZ Finance, and \$500 was paid off the NAB loan.

Prepare a balance sheet to show the business's financial position as of 31 August 2028.

CASE STUDY

Will Andrews is the owner of a small business trading as Andrews' Art Supplies. He studied Accounting in high school, but his knowledge is a little rusty these days. He has prepared a balance sheet for his business but has a few queries for you to consider.

ANDREWS' ART SUPPLIES: BALANCE SHEET AS AT 31 JULY 2028

Assets	\$	Liabilities	\$	\$
Cash at bank	2 420	Bank overdraft	5 000	
Accounts receivable	5 460	Accounts payable	6 000	
Inventory	42 000	GST clearing	5 260	16 260
Computer	3 000	Owner's equity		
Vehicle	36 000	Capital – W Andrews		72 620
	88 880			88 880

Additional information:

- The last bank statement Will received, dated 31 July 2028, showed a balance of \$2420 in his account. However, he expects to run low on cash in the next couple of months and has arranged an overdraft limit of \$5000 with the bank. He has included this as a liability in his balance sheet.
 - The inventory on hand cost the business \$21000, but Will always doubles the cost price to determine the inventory's selling price. He has shown inventory in the balance sheet at the value he expects to receive when it is sold.
 - The computer is located at Will's private home. It was actually purchased by his wife, but she allows Will to use it to do the books of the business. She bought the computer for \$3000 one year ago.
 - The vehicle is used in the business to transport goods. It was purchased six months ago for \$31000, but a friend of Will's, who works in the car trade, tells him: 'You got it for a steal. That car normally sells for \$36000!' Will has accepted his friend's valuation.
- Make a list of any qualitative characteristics or accounting assumptions that Will Andrews may have breached in preparing the above report. Give a full explanation of each breach you identify.
 - Redraft the balance sheet in line with generally accepted accounting practices and assumptions.
 - State the accounting equation that truly represents the financial position of Andrews' Art Supplies.

ETHICAL CONSIDERATIONS

Jon Holland is the owner of Network Connect, a small business that specialises in the supply and installation of wi-fi networks for offices. Jon wants to purchase two new vehicles for his team to use to visit customers and carry installation equipment. He is concerned about the environment and is thinking of buying hybrid vehicles, rather than cars with petrol or diesel engines. However, the comparative costs of the new vehicles are as follows:

- petrol-driven vehicle: \$42 000
- diesel-driven vehicle: \$46 000
- hybrid vehicle: \$52 000.

While the hybrid vehicles cost more, they may cost less to run and maintain on an ongoing basis.

Jon is unsure about which vehicle to purchase and has asked for your opinion. Discuss the options available to him and the financial implications of each. Which vehicle do you recommend he purchase?



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ACCOUNTING IN THE REAL WORLD

Accounting assumptions apply to every business, big and small. However, when you are dealing with larger businesses, there are more transactions to record, more assets to track and generally more challenging work for an accountant. To get a better idea of how complex accounting work can be, visit the websites of the following three public companies in the retailing sector:

- Harvey Norman Ltd **mea.digital/HN**
- JB Hi-Fi Ltd **mea.digital/JB**
- Coles Ltd **mea.digital/coles**

Locate the latest balance sheet for each firm on their site, then create a spreadsheet with the following elements:

- the name of each company
- the total assets figure from each company's balance sheet
- the values for current assets and current liabilities for each company
- a list of the companies in order, according to the value of their total assets

Briefly comment on your findings.

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EXAM-STYLE QUESTIONS**Question 1 (2 marks)**

Consider the following balance sheet extract:

Current assets		Current liabilities	
Cash at bank	4 000	Accounts payable	2 000
Inventory	44 000	Loan – ANZ	14 000
Accounts receivable	2 500		

Select an item from the balance sheet that demonstrates the application of the qualitative characteristic of verifiability. Explain your answer fully.

Question 2 (2 marks)

Explain the link between the going concern assumption and the inclusion of assets in the balance sheet of a business.

Question 3 (2 marks)

Explain the meaning of the term 'net worth' as it relates to the balance sheet of a small business.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

Accounting systems and business documents

In this chapter, you will learn how to create and use accounting systems. You will also learn about the most common business documents and how to use them within an accounting system.

Learning objectives

By the end of this chapter, you will be able to:

- **outline** the basic processes in an accounting system [3.1]
- **describe** the requirements of documents in relation to GST transactions [3.2]
- **distinguish** between the procedures involved in cash and credit transactions [3.3, 3.4]
- **identify** various business documents and **describe** the role of each [3.5]
- **identify** information flows that occur in a small business [3.6]
- **explain** the advantages and disadvantages of computerised systems [3.7]

KEY TERMS

Business documents
Tax invoice
Source documents
Cash receipt
EFTPOS
EFT receipt
Bank statement
Invoice
Memo
Statement of account
Order form
Quotation
Information flow

PRIOR KNOWLEDGE

CHAPTER 1 Accounting essentials

CHAPTER 2 Balance sheets



Estimated time required: 1 week





3.1 The basic accounting process

business documents

documents that record the raw financial data of a business's transactions

The purpose of an accounting system is to generate financial information based on **business documents** (e.g. invoices and receipts) that record the raw data created by a business's transactions. The accounting system then summarises the results in well-designed reports such as income statements and balance sheets (see Figure 3.1).

Figure 3.1 The accounting process



The success of a business's accounting system will depend on the accounting records and business documents it uses. These documents are the starting point of the accounting process, so they must contain all the required details of the business's financial transactions.

Document management

It is standard practice for businesses to produce and retain copies (whether physical or digital) of all business documents to create a permanent record of all their financial events. Large businesses often make multiple copies of their business documents, because there are many different users of the same accounting data. For instance, in a large trading business, the system might work as follows:

- The original document is issued to the customer.
- A white copy is sent to the general accounting department.
- A blue copy is used by the accounts receivable department to update customer accounts.
- A green copy is used to update inventory records.

Each department needs specific details of the transaction. The colours make it easy to identify where the document is to be used.

Small businesses don't need as many copies and can take a simpler approach. They might keep a single physical copy and perhaps a digital copy.



3.2 The GST and business documents

Australia has a Goods and Services Tax (GST) that is applied to most products and services, with a few exceptions (e.g. fresh food). Businesses collect the tax as part of their transactions. They then pay the recorded amount to the Australian Taxation Office (ATO) on a regular basis.

Businesses that collect GST register with the ATO and receive an Australian business number (ABN). The ABN is used to track GST transactions and should appear on all business documents.

Almost all business documents require GST to be tracked and calculated, as it is a basic part of doing business in Australia.

Tax invoices

GST legislation requires businesses to issue a **tax invoice** whenever they provide goods or services to a customer. The tax invoice should contain several key pieces of information, including:

- the name of the business providing the goods or services
- the business's ABN
- the words 'Tax invoice' near the top of the document
- a pre-printed document number (used as a reference number)
- the date of the transaction
- a description of the goods or services provided
- the purchaser's name, together with their address or ABN, if the transaction was for \$1000 or more
- the GST-exclusive price, the GST amount and the GST-inclusive price for each item, together with totals for these.

tax invoice business document used to provide evidence of transactions that include GST

Figure 3.2 shows a typical tax invoice. This document satisfies the demands of the ATO and gives the customer the details they need about their transaction.

FIGURE 3.2 A typical tax invoice

**SANTO'S SPORTS STORE**
Specialists in sporting supplies for schools

82 Queens Avenue
North Melbourne VIC 3051
ABN: 11 122 233 344

To: Brunswick Primary School
12 Sydney Road
Brunswick VIC 3056

TAX INVOICE 1321
Date: 13 Jan 2028
Terms: 30 days

Description	Qty	Unit price	Subtotal	GST	Total
Junior footballs	10	\$30.00	\$300.00	\$30.00	\$330.00
Indoor soccer balls	20	\$20.00	\$400.00	\$40.00	\$440.00
Totals			\$700.00	\$70.00	\$770.00

Total (excluding GST)	\$700.00
Total GST payable	\$70.00
Total amount payable (including GST)	\$770.00

If a supplier is registered for GST, they must state the amount of GST being charged on all invoices.

Although an invoice is normally used to verify a credit transaction, some businesses modify their tax invoices so that they can be used as evidence of a cash sale. This simply involves printing 'Cash receipt' at the top of the document next to 'Tax invoice'. The business must also remove any credit terms from the document, as credit isn't being extended. The document will then comply with ATO requirements, while still providing the information the business owner needs.

GST and receipts

Many small business owners only make cash sales (i.e. they don't provide credit). These businesses cannot issue a formal tax invoice like the one in Figure 3.2. Instead, they simply issue a cash register receipt at the time of sale. However, they must still keep track of all GST collected, and this should be stated on cash receipts issued to customers.

'Cash', in this context, refers to any non-credit payment – it can be physical banknotes and coins or digital funds, so long as the company isn't extending credit to the customer. Customers paying by electronic transfer of funds or by credit card (including 'tap and go' transactions) are considered to be cash customers. Figure 3.3 shows a cash receipt that complies with ATO requirements.

Despite the words 'Tax invoice' on this document, it isn't a credit transaction. It is simply evidence of a receipt of cash. However, as GST has been charged to the customer, legislation still requires that the words 'Tax invoice' appear on the document.

Note that the total GST collected is shown as a separate item on the bottom of the receipt. This is important, because the business owner must be able to record all receipts and payments of GST transactions.

Figure 3.3 A typical cash register receipt showing GST charged

Centro Stationery	
ABN	11 212 454 777
DATE	12/2/28
TAX INVOICE	
1 box blue pens	\$5.50
1 box red pens	\$5.50
1 pkt printer paper	\$6.60
1 pkt office paper	\$7.70
Total payable	\$25.30*
Cash received	\$30.00
Change	\$4.70
*TOTAL INCLUDES GST OF \$2.30	
RECEIVED WITH THANKS. PLEASE CALL AGAIN.	

EXAM-STYLE QUESTION

Describe the role of business documents in relation to accounting for the GST collected by a small business. Refer to one qualitative characteristic of accounting in your answer.

(3 marks)

Sample answer

The ATO may ask for documentary evidence of all transactions, so business owners must keep accurate records of all GST transactions. The qualitative characteristic of **verifiability** requires that all transactions are supported by evidence and that the information is free of personal bias. Therefore, source documents provide the evidence required by both business owners and the ATO. The GST must be stated on all cash receipts and invoices issued to customers, thus providing verifiable evidence.

Exam advice

The accounting assumptions and qualitative characteristics may be examined in relation to many topics in the VCE Accounting Study Design. They are not a standalone topic. Therefore, when answering this style of question, make sure that you relate the qualitative characteristic (or assumption) to the details included in the question. In the question, the key content word is GST and thus the characteristic of verifiability must be linked with and explained in relation to the GST transactions of the business.

Exam tip

When responding to a theoretical-type question, always look for both the *command word* and the *key content word*. **Describe** is the command word in this case and it should guide your response. However, you must also cover the technical content of the question. *Don't waffle*: get straight to the point! This question is about the GST, and about providing evidence of GST transactions. Therefore, your answer must focus on this specific point.

3.3 Source documents for cash transactions



There are several basic business documents that businesses use repeatedly in their day-to-day activities. These are known as **source documents**, because they are the source of the original accounting data.

To use documents as part of an accounting system, you must be able to identify the document, describe its function, and transfer its details to the appropriate accounting record. The most common business transactions are those involving cash inflows (receipts) and cash outflows (payments).

source documents business documents that are the source of financial data

Cash receipts

The document used to provide evidence of a cash inflow is a **cash receipt**. If a business receives cash, it issues a receipt to the customer and keeps a copy for itself. Whether a cash register creates paper copies or digital records, the principle remains the same. At the end of the business day, the retained copies provide the owner with the total of all cash received.

cash receipt a business document used to verify that cash has been received from an outside entity

Handwritten receipts

In addition to the receipt shown in Figure 3.3, a small business might issue a simple handwritten receipt (see Figure 3.4). Although such receipts are becoming less common, some traders still use them. These receipts provide only the essential information: the customer's name, the date of the transaction and the amount of cash received.

Best practice is to write the amount received in both words and numbers, so that it's totally clear how much has been received. This also helps to prevent fraud, by making it harder for someone to change the numbers on the receipt at a later date.

Figure 3.4 A typical handwritten cash receipt

MB Costume Supplies
1004 Hoffmans Road
Essendon VIC 3040
ABN 04 213 984 618

REC. 32
Date 16/1/28

Received from *L Palmer*
The amount of *Four hundred dollars* \$ *400.00*
For *Payment on account*

Signed *M Bateman*

Thank you for your business

Although hand-written receipts are still acceptable, most receipts are now produced electronically.

EFTPOS receipts

Changes in technology always influence accounting processes. All cash inflows used to involve literal cash, but electronic fund transfers (EFT) are now commonplace, even in small businesses. The introduction of affordable, hand-held devices to complete electronic transfers has changed how small businesses operate on a day-to-day basis.

EFTPOS (Electronic Funds Transfer at Point of Sale) systems allow businesses to record **EFT receipts** of cash, to provide a copy of the transaction to customers, and to have funds deposited directly into their business bank account. An added bonus is that the business handles less cash in carrying out its daily banking.

EFTPOS Electronic Funds Transfer at Point of Sale

EFT receipt a document issued when an EFT payment has been made

‘Tap and go’ systems provide more transaction data, eliminate the issues associated with cash (e.g. theft by employees, the need for change, etc.) and bring us closer to a cashless society.



An EFTPOS terminal accepts both debit and credit cards, with no risk to the business owner. However, when a credit card is used, the business owner isn’t making credit available to a customer. For the business owner, such a sale is as good as cash. The bank is responsible for chasing up the amount owing via its usual credit card practices, but the business that makes the sale will usually have the cash in its account within 24 hours.

The introduction of ‘tap and go’ technology has seen a significant increase in the use of both debit and credit cards. Some people see this as evidence that we are moving towards a cashless society. The documentation relating to EFTPOS transactions is therefore even more important for business owners, as it will provide most of the information they need about their business’s sales activity.

Figure 3.5 shows the details required by both the business and the customer, including:

Figure 3.5 A typical receipt from an electronic transfer of funds

ACME BANK	
MB Costume Supplies	
1004 Hoffmans Road	
Essendon VIC 3040	

CUSTOMER COPY	

Merchant number:	312103
Terminal number:	XY2132

PURCHASE	
DEBIT: MasterCard XXXXXXXXXXXX1355	
Date/time:	26/02/28 11:57:30
Authorisation:	2419944

TOTAL:	AUD \$45.00

- the name of the bank used by the business, which is linked to the EFTPOS terminal (ACME Bank)
- the name and address of the business making the sale (MB Costume Supplies)
- identification numbers for the EFTPOS terminal (merchant number and terminal number)
- the last four digits of the card being used (1355)
- the date and time of the transaction (26 February 2028 at 11.57 a.m.)
- an authorisation number (2419944)
- the total dollar value of the transaction (\$45 Australian, or AUD).

This receipt is a copy for the customer to keep for their records. The EFTPOS terminal also produces a copy for the business’s records, which it should store for checking at a later date. Banks usually provide a summary of EFTPOS transactions, which can be printed on a daily basis by the terminal.



Cash payments

Traditional business practice was to make cash payments by cheque. However, cheques are no longer in common use by small business owners in Australia and are likely to be phased out entirely by 2030. EFTPOS terminals and online payment systems have changed the way most businesses record both their sales and their payments. EFT is now the most efficient way of paying suppliers.

EFT payments will be listed on **bank statements**, which are usually prepared monthly and provide a summary of the month's cash transactions. The business owner can easily check all transactions via these statements. They can also print or save a copy of any EFT payment at the time of payment if required.

bank statement a document that summarises all cash transactions between a bank and its customer

3.4 Source documents for credit transactions



Many businesses make credit available to their regular and trusted customers, which allows them to receive goods or services but pay for them later. Similarly, most trading businesses purchase their inventory on credit from their suppliers. Buying inventory for cash can drain a business's liquid resources, while trade credit provides time for a business to sell some of its inventory before it must pay its accounts payable. Source documents are needed to provide evidence of all such credit transactions.

Invoices

An **invoice** informs a credit customer of the total cost of the goods provided. When goods are purchased on credit, an invoice records the cost of the goods supplied. Invoices can be both received and issued by businesses when buying and selling on credit.

invoice a document that shows the creation of a debt when a credit transaction has taken place

For example, MB Costume Supplies buys inventory on credit from its suppliers and provides products on credit to its customers. In this case, the business receives an original invoice from its supplier whenever it purchases inventory items on a credit basis. If MB Costume Supplies sells goods on credit, it issues an invoice to the customer (account receivable) and keeps a copy for accounting purposes. The invoice informs the customer of the amount owing for a sale made on credit.

Figure 3.6 shows an invoice received when MB Costume Supplies purchased goods on credit. Figure 3.7 shows an invoice issued by the same business when it provided goods on credit to one of its customers.

Figure 3.6 A typical purchase invoice

Central Tailoring Supplies
 1804 Queensberry Street
 North Melbourne VIC 3051

TO MB Costume Supplies
 1004 Hoffmans Road
 Essendon VIC 3040

TAX INVOICE DF8124
ABN 22 233 344 455
DATE 12/3/28

CREDIT TERMS 30 days

DESCRIPTION	QUANTITY	UNIT PRICE	SUBTOTAL	GST	TOTAL
Dressmaking scissors	12	\$40.00	\$480.00	\$48.00	\$528.00
10 mm clear buttons	100	\$0.10	\$10.00	\$1.00	\$11.00
TOTALS			\$490.00	\$49.00	\$539.00

Total (excluding GST)	\$490.00
Total GST payable	\$49.00
Total amount payable (including GST)	\$539.00

Note that the name of the business generating the document will be printed at the top of each document.

Figure 3.7 A typical sales invoice

MB Costume Supplies
 1004 Hoffmans Road
 Essendon VIC 3040
ABN 33 344 455 566

To: L Barnes
 98 Charles Road
 East Malvern VIC 3145

Tax invoice: 124
Date: 21/3/28

Description	Quantity	Unit price	Subtotal	GST	Total
1 m red nylon fabric	2	\$10.00	\$20.00	\$2.00	\$22.00
25 mm black rectangle buckle	6	\$2.50	\$15.00	\$1.50	\$16.50
Totals			\$35.00	\$3.50	\$38.50

Total (excluding GST)	\$35.00
Total GST payable	\$3.50
Total amount payable (including GST)	\$38.50

Credit terms: Strictly 30 days

3.5 Other business documents



An accounting system gathers most of its data from source documents such as invoices, payment forms and receipts. However, a business may use many other documents in its daily operations.

Memos and internal transactions

Sometimes a business makes a transaction that doesn't involve another business or individual; it only affects the business and its owner. These are known as internal transactions, because they don't involve external parties. Typical internal transactions involve the owner contributing or withdrawing assets other than cash.

Contributions or withdrawals of cash can be recorded using the same documents the business uses to record receipts and payments. However, if an owner withdraws inventory from the business, none of the documents you have learnt about so far are suitable. Invoices, receipts and EFT records are all designed for specific purposes – a withdrawal of inventory isn't one of them. Some businesses may also donate inventory items for advertising purposes, or simply as a charitable act.

It isn't important who receives the withdrawn inventory; the inventory given away must still be accounted for, just like any other financial event. The cost or benefit of inventory changes must be recorded, and a note written to verify donations made to organisations. As with all business documents, these notes – called office memorandums, or **memos** – can be used to provide verifiability of financial events.

Memos are another example of source documents used to provide evidence of internal transactions. Memos should be very simple in design, as they are used to record a range of unusual transactions.

memo a note used to record an internal transaction

Figure 3.8 A typical memo

 MB Costume Supplies	
Memo No.	346
Date	25/3/28
Office memo	Withdrawal of one tailoring mini-torso on stand Cost price: \$210
Signed	<i>M Bateman</i>

The memo in Figure 3.8 has all the details necessary to ensure that this internal transaction isn't overlooked. It includes the date of the transaction and a brief description of the event. It also provides evidence of the cost price of the goods withdrawn by the owner. This information can be noted in the records of the business on the appropriate date.

Statements of account

A business that provides credit to its customers must ensure that accounts are collected promptly. Many businesses allow their customers 30 days to settle their accounts; some may allow 60 or even 90 days.

As multiple business documents may move between the business and a customer in any given month, the situation must be reviewed regularly. A **statement of account** is used to summarise the transactions involving a credit customer over a given period (see Figure 3.9). Common business practice is to issue monthly statements of account.

The statement should show the balance owing at the start of the month, all purchases made during the month and any payments made in that time. The final figure on the monthly statement is the amount currently owing to the business.

A statement of account provides a compact summary of the month's transactions. It should also include references to any source documents relating to the transactions that have occurred.

statement of account

a business document issued to credit customers, summarising transactions between the customer and the supplier

Figure 3.9 A typical statement of account

 Central Tailoring Supplies 1804 Queensberry Street North Melbourne VIC 3051				
IN ACCOUNT WITH MB Costume Supplies 1004 Hoffmans Road Essendon VIC 3040			STATEMENT FOR March 2028 DATE 31/3/28	
DATE	DETAILS	DEBITS \$	CREDIT \$	BALANCE \$
Mar 1	Balance			300.00
Mar 3	Payment – thank you		300.00	0.00
Mar 12	Invoice DF8124	539.00		539.00
Mar 22	Invoice DF8168	56.00		595.00
Mar 31	Balance at end of month			595.00

Common business practice is to issue monthly statements of account (e.g. for all transactions with a supplier of inventory).



Order forms

An **order form** is used to request that a supplier deliver goods or materials to a business (see Figure 3.10). However, placing an order isn't a financial transaction, as orders may be changed or even cancelled. When the goods are delivered, a payment form may be completed or an invoice received, depending on whether it is a cash or a credit purchase. At this point, a transaction has occurred and the payment form or invoice becomes the source document.

order form a business document that requests goods or services from a supplier

Figure 3.10 A typical order form

MB Costume Supplies
1004 Hoffmans Road
Essendon VIC 3040

Supplier:
Central Tailoring Supplies
1804 Queensberry Street
North Melbourne VIC 3051

Order No. 980
Date: 1/4/2028

Please supply the following:

Quantity	Description
12	Dressmaking scissors
100	10mm clear buttons

Delivery requirements: Urgent – will pick up

Signed *M. Bateman*

Quotations

A **quotation**, or quote, is an estimate of costs provided to a potential customer (see Figure 3.11). As with order forms, a quotation isn't a source document because a transaction hasn't yet occurred. The quotation may be rejected or may need to be modified. The customer has to agree to the price, and the business has to supply the goods or perform the job, before a transaction has occurred.

quotation a business document that provides a potential customer with a cost estimate for goods or services

Figure 3.11 A typical quotation form

MB Costume Supplies
1004 Hoffmans Road
Essendon VIC 3040

Quote prepared for:
B Downe
321 Grieve St
North Coburg VIC 3058

Quotation No. 380
Date: 15/4/2028

Description

Supply of 40 metres of non-stretch cotton lace @ \$5 per metre: \$200.00
Delivered to above address

N.B. Quotation valid for 30 days only

Signed *M. Bateman*

Delivery dockets

A delivery docket is often included with a parcel of goods when a supplier makes a delivery. The business or person buying the goods is often asked to sign a copy of the delivery docket as evidence that the goods have been delivered and accepted by the purchaser. Delivery dockets don't usually state the cost of the goods. Rather, they simply include a description of the goods and state the quantity being delivered. These details will be stated on the invoice later, along with the actual costs being charged. Note that the details of a delivery docket are NOT recorded in the accounting system. This only takes place when the invoice is issued to the customer, notifying them of all the costs, including GST.

Shipping confirmations

With many businesses selling goods online, shipping confirmations (also known as order confirmations) are now in common use. Once an order has been placed online and the supplier dispatches the goods, they send a shipping confirmation to the customer. This is usually done via email, with many businesses providing a confirmation number. In some cases, this number allows the customer to track the process of their delivery. With so much business being done via online sales, the shipping confirmation has become an important part of business. However, this document is another example of a non-recordable event. Just as an order isn't recorded in the accounting system, neither is an order (or shipping) confirmation. The financial transaction will only be recorded when cash changes hands, or an invoice is issued or an EFT is completed.

EXAM-STYLE QUESTION

A small business owner has just received a statement of account from one of its suppliers. **Explain** how the owner should use this document when it receives it at the end of the month.

(2 marks)

Sample answer

As a statement of account is a summary of all transactions between the owner and their supplier, all entries on the statement should be checked carefully against the entries made by the owner in the records of their business. As the statement has been prepared by the supplier, this provides an independent check of all transactions between the two businesses. To avoid making an overpayment to the supplier, it is vital to check all transactions before payment is arranged.

Exam advice

Make sure that you read the lead-in to all theoretical questions. Business documents are often presented in examinations. Read these documents carefully, but also check the lead-in again to check the name of the business that is under consideration. (It is usually mentioned at the top of the question.) You can then establish whether the business is making a sale or making a purchase. Remember: For every buyer, you must have a seller – and vice versa. Always check which business you are recording for!

3.6 Documents and information flow



The source documents described so far are common to almost all businesses. However, a trading business designs its accounting system to suit its own particular needs, and it may require other documents to be recorded and analysed. These other documents may include cash register rolls, delivery dockets, employee pay slips and bank statements, all of which may supply valuable data for accounting purposes.

The distribution of data in a business, which then informs its actions and decision-making, is known as **information flow**. Accounting systems are an integral part of information flow, as they record the business documents and generate the reports that keep information moving. Accountants need to be able to trace that information back to the original source documents in each case.

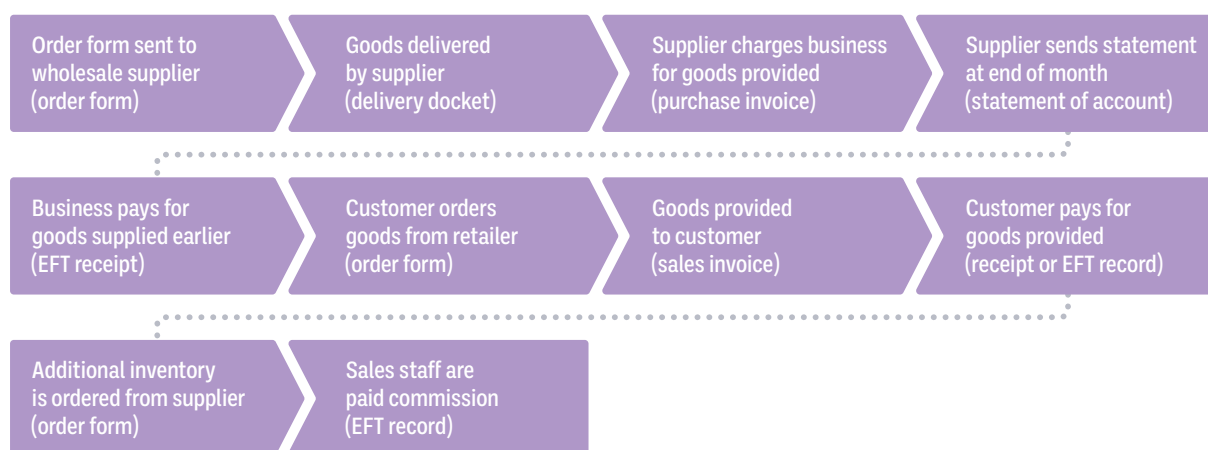
information flow the distribution of data through a business

An information flow example

Figure 3.12 shows one extended information flow that could occur in the day-to-day operations of a costuming retailer. The relevant business documents are shown in brackets where applicable. This simple example shows the vital nature of the information contained in business documentation. The figure doesn't show all the possible information flows for this situation, but it does show how important business documents are for providing information to management.

Documents will move in and out of a business on a continuous basis during a reporting period. As information will be transmitted between many business entities, an organised approach is key to a successful accounting system.

Figure 3.12 A typical information flow, including business documents



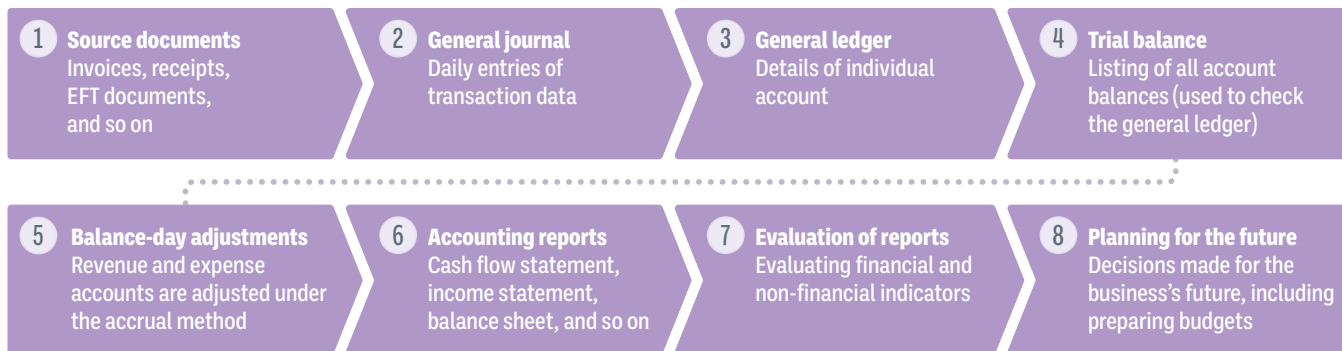
Overview of an accounting system

Business documents create a great deal of paperwork, yet they are only the starting point of an accounting system. The actual processes within an accounting system trace the movement of raw data from business documents through to accounting reports.

A typical double entry accounting system has eight core processes or elements. You have already looked at the first of these – source documents. You will learn about each of the remaining processes in upcoming chapters.

Figure 3.13 represents a typical double entry accounting system. Refer back to this flowchart as further topics are introduced, so that you can see how processes and elements fit into the overall accounting system.

Figure 3.13 A double entry accounting system



1 Source documents

These are the original sources and records of accounting data, which you have already examined.

2 The general journal

This is sometimes known as a day book, as it is used on a daily basis to record the details of the data contained in source documents. The journal represents the start of the recording process. Ledgers, journals and day books may be physical books or (more commonly) digital records.

3 The general ledger

A ledger consists of many individual accounts, which are used to record the details of a particular item. For example, the Wages account contains the information relating to the wages expense for a period. The Cash at Bank account shows all the business's cash transactions.

The general ledger is where the process of double entry accounting occurs. For each transaction, entries are made in two accounts affected by the transaction: a debit entry and a credit entry. These entries contain information transferred from the journal to the ledger accounts. Raw data from documents is recorded first in the general journal and is then posted to the ledger accounts.

4 Trial balance

The preparation of a trial balance is a checking procedure to verify that the double entry procedure has been carried out correctly. The trial balance lists the balances of all general ledger accounts. It allows you to check that the total of all the debit entries equals the total of all the credit entries.

5 Balance-day adjustments

Under the accrual method of accounting, profit is defined as revenue earned less expenses incurred. The information in a trial balance may not necessarily fall in line with this definition, as the ledger accounts sometimes only include revenue received and expenses paid. Therefore, revenue and expense accounts are adjusted on the last day of the reporting period (i.e. balance day) so that they equal the revenue earned and expenses incurred.

6 Accounting reports

At the end of each reporting period, accounting reports are prepared to provide the owners and/or managers with the results of the period's activities.

7 Evaluation of reports

Once accounting reports have been prepared, the results must be evaluated and any problem areas identified. The business's performance is usually measured by comparing results against several criteria. Areas of evaluation will usually include the business's profitability, liquidity, efficiency and financial stability. You will learn more about these areas in later chapters.

8 Planning for the future

Management decisions should be made based on the current period's results. Budgets should be prepared in a variety of areas for future periods, to allow proper planning decisions to be made. Cash budgets and budgeted income statements should be prepared on a regular basis.

3.7 Computerised accounting systems



The double entry accounting system described above is appropriate for a system where an accountant makes manual entries on a daily basis. However, most businesses use computerised accounting systems, with commercial software packages that take care of all their GST requirements. Even for many small business owners, computerised accounting isn't an option – it's a necessity.

Advantages and disadvantages

Computerised systems have several advantages:

- They are more accurate, because human error is removed.
- They can process data much faster than manual recording processes.
- They can store large amounts of financial information efficiently.

Computers are reliable and accurate, so they are a valuable tool for management. However, the principles of double entry accounting still apply in a computerised system. The principles of the overall accounting system are basically the same for both manual and computerised recording methods.

There are two main disadvantages for small business owners considering an accounting software package:

- The cost of a computerised accounting system has decreased significantly, but it is still significantly more expensive than a manual system.
- The owner must have some computing skill and knowledge and be willing to introduce software packages as part of their business's accounting system.

As with any business decision, the benefits of a computerised system should be weighed against the costs of installing and using it. A very small business might decide not to purchase a computerised system, because the volume of data wouldn't justify the extra expense. The larger the business, the more likely it is to benefit from a computerised system.

Computerised systems in practice

Commercial accounting packages all work on the same basic principle. The system takes the raw data from the source documents and records it in accounts using the double entry process. The output of the package acts as a trial balance, providing a summary of the period's transactions. Some packages will also prepare the actual accounting reports.

A computerised package removes most of the need to record information manually. This means the owner can focus more on evaluating the information the software generates.

Accounting software saves time by automating workflows around invoicing, billing and reporting.



Figure 3.1 (page) showed the basic accounting process in a manual system. This diagram can be modified to show the basic steps in a computerised system. Figure 3.14 highlights the fact that the computer is merely a tool used by management to generate the required accounting information.

Figure 3.14 The accounting process (computerised system)



It is important that the business clearly defines its requirements before it purchases and implements accounting software. Accounting packages are of little use if they don't produce the information the business requires. Software should also make the process of recording and reporting more efficient. If there is no obvious net benefit of purchasing a full commercial software system, an owner can always use Microsoft Excel. For many small business owners, Excel may be all they need.

Choosing an accounting package

There are several commercial accounting packages now in common use. MoneyWorks, Mind Your Own Business (MYOB), QuickBooks and Xero are all popular in Australia. These packages, which are relatively cheap and fairly simple to use, are marketed as complete accounting systems for small businesses. They have been created for use on a personal computer – or even on a tablet – and are an ideal tool for a small business owner to keep track of their business's financial affairs.

Typical accounting programs can be used to:

- create business documents (order forms, invoices, statements, etc.)
- record receipts and payments
- record credit transactions
- record inventory movements
- prepare bank reconciliations
- record all GST transactions
- prepare accounting reports.

The aim of such programs isn't to drive accountants out of business. In fact, many accountants advise their clients to use such software so that their business keeps organised records. The programs provide a structure that the user must follow. The user is given reminders and checklists to ensure that they complete all processes properly. At the end of the year, of course, they should seek advice regarding taxation from a qualified accountant.

For a small outlay, business owners can run accounting software that is comprehensive, accurate and capable of generating a wide range of reports.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [3.1]** The basic role of an accounting system is to record and report on financial transactions. Business documents are the starting point of the accounting process and provide the details of a business's transactions.
- [3.2]** Almost all business documents require the 10% Goods and Services Tax (GST) to be tracked and calculated.
- [3.3]** Source documents are core business documents that contain financial data. The most common source documents for cash transactions are receipts, which record cash inflow, and payment records, which record cash outflow.
- [3.4]** The main source documents for credit transactions are invoices, which record either a sale or a purchase.
- [3.5]** Other key source documents include memos, which record internal transactions, and statements of account, which summarise credit transactions over a period.
- [3.5]** Businesses also generate and use other documents, such as order forms or quotations. However, these documents don't record transactions and may not be considered source documents by all accounting systems.
- [3.6]** Accounting systems are vital to the distribution of data within a business, which is known as information flow.
- [3.6]** The processes within an accounting system trace the movement of data from business documents through to accounting reports.
- [3.7]** Most small businesses use computerised, rather than manual, accounting systems. The principles of the overall system are basically the same for both recording methods.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Business documents

The following transactions relate to Anile's Auto Parts. For each transaction, indicate the business document used by the business.

- 1 Charged a customer for a credit sale
- 2 Paid cash for spare parts
- 3 Received cash for goods sold
- 4 Sold goods via EFTPOS terminal
- 5 Purchased spare parts on credit
- 6 Paid monthly rent
- 7 Sent a bill to a customer for goods sold on credit
- 8 Paid accounts payable by EFT

2 Identifying documents

Consider the following document, which was found in the offices of Ballarat Lighting.

 **Ballarat Lighting**

Shop 12, Henderson Road
Ballarat VIC 3350

Supplier:
Zang Electricals
84 Grieve Street
Northcote VIC 3070

No. 101
Date: 5/4/28

Please supply the following

Quantity	Description
6	Tracey ceiling fans (with lights) – product no. 34211
10	Calypso desk lamps – model D321
Delivery required by 30/4/28	

Signed Alan Pitson

- a What is the name of this document?
- b Which business would have created this document?
- c Will this document lead to the creation of other business documents in the future?
Explain your answer fully.
- d Describe the twofold effect that this document would have on the balance sheet of Ballarat Lighting.



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3

Credit transactions

The manager of Hernandez Hardware has the following document in his possession.

 TOPLINE TIMBERYARD Geelong Road West Footscray VIC 3012 ABN 31 921 291 129		No. 24512 Date 2/5/28 Terms 30 days	
To Hernandez Hardware 5 Charles Street Hurstbridge VIC 3099		TAX INVOICE	

Quantity	Description	Unit price	Subtotal	GST	Total
10	1000 × 100 × 50 mm treated pine	\$9.00	\$90.00	\$9.00	\$99.00
20	3-metre sleepers	\$8.00	\$160.00	\$16.00	\$176.00
Totals					\$275.00

Total (excluding GST)	\$250.00
Total GST payable	\$25.00
Total amount payable (including GST)	\$275.00

- What is the name of this document?
- What is the nature of the transaction shown in this document?
- Would Hernandez Hardware have created this document? Explain your answer.
- Explain what the note 'Terms: 30 days' means.
- Which business has a GST debt to the ATO as a result of this transaction? Explain your answer fully.
- State the balance sheet items affected by this document and whether they are increasing or decreasing on the balance sheet of:
 - Hernandez Hardware
 - Topline Timberyard.

4 Credit transactions

Consider the following document.

 **AAA Stationery**
 9121 Huxtable Avenue
 North Altona VIC 3025
 ABN 37 217 771 178

TAX INVOICE No. 6572
DATE 4/2/28
TERMS 30 days

ACCOUNT NAME
 City Newsagency
 24 Spencer Avenue
 Melbourne VIC 3000

QUANTITY	DESCRIPTION	COST	SUBTOTAL	GST	TOTAL
5	Reams 80 gsm printer paper	\$7.00	\$35.00	\$3.50	\$38.50
20	A4 office pads	\$1.50	\$30.00	\$3.00	\$33.00
					\$71.50

Total (excluding GST) **\$65.00**
 Total GST payable **\$6.50**
Total amount payable (including GST) \$71.50

All accounts are net 30 days

- a Which business would have:
 - i created this document?
 - ii received this document?
- b What type of document is this, and what is its purpose?
- c What is the purpose of the number 6572 on this document?
- d Explain how this document affects the balance sheet of AAA Stationery.

5 Cash transactions

Eva's Aquarium Sales has a copy of the following document.

 **EVA'S AQUARIUM SALES**
 17 John Street
 Williamstown VIC 3016
 ABN 04 213 984 618

NO. 135
DATE 26/2/28

RECEIVED FROM B Mason

THE AMOUNT OF Fifty dollars **\$** 50.00

FOR Payment on account No. 11022

SIGNED A Sharon

THANK YOU FOR YOUR BUSINESS

- a What is the name of this source document?
- b Explain why the amount is written in both words and numbers.
- c A friend of Eva suggests that a computerised system could generate such documents. Explain to Eva two benefits of using a computer for such a process.
- d Describe two disadvantages of introducing a computer into Eva's business.



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6 Office memos

Louise O'Neill is the owner of O'Neill's BBQs. She has provided you with the following business documents.

O'NEILL'S BBQs

Memo No. 101

Date 22/2/28

Office memo One twin grill: cost \$550
One BBQ smoker: cost \$150
(Son's birthday)

Signed L O'Neill

O'NEILL'S BBQs

Memo No. 102

Date 3/3/28

Office memo Donation of twin grill w/ folding cart
to Pascoe Vale Primary School for
raffle prize
Cost price \$690

Signed L O'Neill

- Describe the two transactions recorded on the two office memos.
- Explain why memos such as these are necessary.
- Explain the twofold effect of memo number 101 on the balance sheet of O'Neill's BBQs.



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7 Identifying documents

The following document was found in the offices of Point Cook Computers, a small business owned and operated by Brian Moloney.

POINT COOK COMPUTERS

999 Aviation Road
Point Cook 3030
ABN 21 546 434 379

STATEMENT FOR DATE 30 June 2028

Alessio & Associates
231 Geelong Road
Laverton VIC 3028

DATE	DETAILS	DEBIT \$	CREDIT \$	BALANCE \$
1 Jun	Balance			540
8 Jun	Invoice 37282	430		970
15 Jun	Payment – with thanks		540	430
24 Jun	Invoice 37314	560		990

- What is the name of this business document?
- Which business:
 - created the document?
 - received the document?
- In a balance sheet prepared by Brian Moloney, under what heading would you expect to find Alessio & Associates?
- Describe the nature of the transaction that occurred on 24 June.
- Explain the purpose of this document.

8 EFT transactions

Jack Chrystie, the owner of Northern Speed Cycle, has provided the following business document for your use.

EFT RECEIPT NO. JA125112	
AMOUNT	\$2600
FROM Northern Speed Cycle	ACCOUNT: 04-546 8010 1956 WESTERN BANK
TO AXE Sports Wear	ACCOUNT: 099-404 1512 9125 STATE BANK
DATE/TIME Tuesday 4 April 2028 11.05 a.m.	

- Describe the nature of the transaction evidenced by this document.
- Which common business document has it replaced? Explain your answer fully.
- With which bank does AXE Sports Wear do its banking?
- In a balance sheet prepared for Northern Speed Cycle, under which classification would you expect to find AXE Sports Wear? Justify your answer.

9 Identifying documents

The following two documents have been generated by Valerie Horne, the owner of Fawkner Fashions.

ACME BANK Fawkner Fashions 401 Douglas Avenue Fawkner VIC 3060 CUSTOMER COPY Merchant number: A2130 Terminal number: 535 PURCHASE DEBIT: VISA XXXXXXXXXXXX8231 Date/time: 5/3/28 15:52 Authorisation: 8382 TOTAL: AUD \$68.00	ACME BANK Fawkner Fashions 401 Douglas Avenue Fawkner VIC 3060 MERCHANT COPY Merchant number: A2130 Terminal number: 535 PURCHASE DEBIT: VISA XXXXXXXXXXXX8231 Date/time: 5/3/28 15:52 Authorisation: 8382 TOTAL: AUD \$68.00

- What are the names of these two documents?
- Explain why Horne has generated the two documents shown and describe the purpose of each.



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CASE STUDY

Lynne Gray has decided to establish a small business, trading as Bayside Barista Beans. She is unsure about a few organisational matters relating to the accounting needs of her business and has asked you for advice. She provides you with the following notes:

- A friend has advised her to keep copies of all documents used in the day-to-day affairs of her business.
- She expects that most of her sales will be for cash, but occasionally she may sell on credit to local schools.
- She is considering seeing her bank to arrange an EFT terminal for her business.
- Several coffee bean suppliers will provide the inventory she plans to sell. Lynne expects all those suppliers to provide her with trade credit terms of 30 days.
- Similarly, she may extend credit terms to customers with a proven credit history.
- As most of her sales will be for cash, she anticipates always having cash in the register, so paying her expenses in cash won't be a problem. (There is a bank branch across the road from the shop.)



- a** Make a list of all the business documents that Lynne could reasonably expect to use in the operation of her new business. Beside each document name, briefly note its purpose.
- b** Which of the business documents you listed will run in sequential order, according to their document numbers?
- c** If Lynne makes a credit sale to a local cafe, name six different items that should appear on the document she issues to the customer.
- d** Lynne is considering using an EFT terminal. Explain to her the benefits of using EFT, rather than offering credit to her customers.
- e** Comment on Lynne's method of paying expenses using cash from the cash register of the business.
- f** Lynne's friend advises her that cash register rolls have two functions in accounting for a small business. Describe these two functions.
- g** Explain the link between business documents and the qualitative characteristics of accounting.
- h** Use a spreadsheet to design a tax invoice for Lynne's business that would satisfy the ATO in relation to its GST guidelines.



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ACCOUNTING IN THE REAL WORLD

Accounting software packages are constantly being upgraded to suit the needs of small businesses. Go online and research the latest programs available in relation to computerised accounting.

- a** List five accounting packages available for small business owners.
- b** Write a brief description of each package, noting any unique features or its advantages.
- c** Which package do you think would be the most effective and useful to you in your professional accounting future? Explain your answer.

EXAM-STYLE QUESTIONS



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Question 1 (4 marks)

Consider the following document, received by the owner of Kershaw's Gift Shop on 31 March 2028.

Date	Details	Debit	Credit	Balance
1 Mar	Balance			390
6 Mar	Invoice BN312			670
14 Mar	Payment – with thanks		200	
24 Mar	Invoice BN326	430		

a State the type of document shown above.

(1 mark)

b Complete the document by filling in the three shaded spaces with the correct dollar amounts.

(3 marks)

Question 2 (3 marks)

Mackenzie Harvey, the owner of Carlton Sports, currently has a debt to the ATO of \$1400 for GST collected. He has just received an invoice from one of his suppliers who provides cricket equipment to be sold in his retail shop. The invoice has a total amount owing of \$1595, including GST. Complete the following table to show the effect of this transaction on the balance sheet of Carlton Sports.

	Increase/Decrease/No effect	\$
Assets		
Liabilities		
Owner's equity		

Question 3 (2 marks)

Explain why an order form should NOT be used to record a financial transaction for a small business.

Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Double entry recording: An introduction

This chapter focuses on the double entry process used in the general ledger and introduces debit and credit entries. The general ledger is a recording system that consists of a number of accounts. An account is used to record the details of a particular item. The data recorded in ledger accounts comes from the business documents introduced in Chapter 3.

KEY TERMS

Double entry accounting
Ledger account
General ledger
Analysis chart

Learning objectives

By the end of this chapter, you will be able to:

- **define** 'double entry accounting' [4.1]
- **state** the rules of double entry accounting for the different types of accounts [4.1]
- **determine** when a debit entry or a credit entry is required in a variety of accounts [4.1]
- **prepare** an analysis chart showing debits and credits for a variety of transactions [4.1]
- **state** the rules of double entry for assets, liabilities, owner's equity, revenues and expenses [4.2]

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 2: Balance sheets

CHAPTER 3: Accounting systems and business documents



Estimated time required: 1 week



4.1 Double entry accounting and the accounting equation



Chapter 2 introduced the concept of **double entry accounting**. You learnt there that, when a balance sheet is prepared following a financial transaction, two report items are affected by the same dollar amount. This is the essence of double entry accounting: every transaction affects two items.

However, it's not practical to prepare a new balance sheet after every transaction. Instead, accountants prepare a balance sheet only at the end of each reporting period; they record in **ledger accounts** the transactions that occur during that period. These ledger accounts are kept together and make up a record called the **general ledger**.

A ledger account is a financial record that relates to a particular area within the business. For example, the details relating to a business's wages would be recorded in the Wages account. When wages are paid in cash, the other half of the double entry would be recorded in the Cash at Bank account. If the business purchased a vehicle for cash, the details would be recorded in a Vehicles account and the Cash at Bank account.

double entry accounting
a system in which two ledger entries, a debit and a credit, are made for each transaction

ledger account a financial record for all details of a particular item

general ledger a collection of ledger accounts in which double entry accounting is used

Figure 4.1 Sample ledger accounts

VEHICLE					
Date	Cross-reference	\$	Date	Cross-reference	\$
1 Mar	Cash at bank	16 000			

The date should always be recorded for every transaction.

WAGES					
Date	Cross-reference	\$	Date	Cross-reference	\$
4 Mar	Cash at bank	400			

The cross-reference column states the name of the other account affected. In this case, when wages are paid, the transaction affects both the Wages and the Cash at Bank accounts.

CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
			1 Mar	Vehicles	16 000
			4 Mar	Wages	400

Ledger accounts

A ledger account entry has three parts, completed in the following order:

- 1 date of the transaction
- 2 name of the other account affected by the double entry (referred to as a cross-reference)
- 3 actual dollar value of the transaction.

As Figure 4.1 shows, for every transaction, there is an entry on the left (debit) side of one account and a corresponding entry on the right (credit) side of another account. This is the nature of double entry accounting: one debit entry and one credit entry for each financial transaction.

LEDGER ACCOUNT					
Date	Cross-reference	\$	Date	Cross-reference	\$
	DEBIT SIDE			CREDIT SIDE	

There are set rules as to whether an entry is a debit or a credit. The easiest way to learn these rules is to work from the basic format of a T-form balance sheet:

BALANCE SHEET			
ASSETS		LIABILITIES	
		OWNER'S EQUITY	

Assets are increased
by debit entries.

Liabilities and owner's equity are
both increased by credit entries.

The format of the balance sheet shows the rules of double entry accounting. Assets appear on the left side of the report and are debit in nature. Liabilities and owner's equity are on the right side and are credit in nature.

Assets will usually have debit balances and are increased by debit entries. Liabilities and owner's equity accounts will usually have credit balances and are increased by credit entries.

The opposite is true if an account decreases. Assets (A) are decreased with credits, and liabilities (L) and owner's equity (OE) are decreased with debits (see Figure 4.2).

Figure 4.2 Rules for double entry recording (A, L, OE)

Account classification	Increased by	Decreased by
Assets	Debits	Credits
Liabilities	Credits	Debits
Owner's equity	Credits	Debits

Recording ledger entries

There is a simple, consistent process for determining the entries in ledger accounts. Follow these four steps until you are comfortable with this process:

Step 1: State the two ledger accounts affected by the financial transaction.

Step 2: Classify the accounts according to their balance sheet classifications.

Step 3: State whether the account is being increased or decreased.

Step 4: Refer to the rules of debit and credit and state whether the accounts will have a debit or a credit entry.

You should follow these steps in sequence until you fully understand the rules of double entry.

EXAMPLE 4.1

A business purchases a second-hand vehicle for cash. No GST is to be recorded.

1 Two ledger accounts affected: Vehicle and Cash at Bank.

2 Balance sheet classifications: asset and asset.

3 Increase or decrease: Vehicle increases and Cash at Bank decreases.

4 Debit or credit: debit the Vehicle account and credit the Cash at Bank account.

There is one debit entry and one credit entry, so the rules of double entry are satisfied.

The *debit* entry to the Vehicle account is required because this account has to be increased.

The business has paid cash for the vehicle, so the Cash at Bank account is decreased – that is, assets are decreased by credit entries.



Purchasing a vehicle is recorded as two entries in the accounting system.

EXAMPLE 4.2

A business takes out a loan. No GST is to be recorded.

1 Two ledger accounts are affected: Cash at Bank and Loan

2 Balance sheet classifications: asset and liability

3 Increase or decrease: Cash at Bank increases and Loan increases

4 Debit or credit: debit the Cash at Bank account and credit the Loan account

Both ledger accounts are increased by the transaction. The Cash at Bank account is increased because the business has received cash via the loan. The Loan account is increased because the business now has a present obligation to another entity. However, one debit entry and one credit entry are still created by the transaction.

You should also get used to recording business transactions that include the GST.

EXAMPLE 4.3

A business buys a computer for \$2000 cash, plus GST of \$200. In this case, three accounts will be affected by the transaction. You can use the same approach to determine the debits and credits required.

- 1 Three ledger accounts affected: Computer, Cash at Bank and GST Clearing.
- 2 Balance sheet classifications: asset, asset and liability.
- 3 Increase or decrease: Computer increases, Cash at Bank increases and GST Clearing decreases.
- 4 Debit or credit: debit the Computer account, credit the Cash at Bank account and debit the GST Clearing account.

There are two debit entries and only one credit entry. However, once the amounts are included, the entries must balance out. The Computer account is debited \$2000, GST Clearing is debited \$200 and Cash at Bank is credited \$2200. The two debit entries therefore equal the same dollar amount as the credit entry to Cash at Bank.

'GST Clearing' is the usual title of the account used to keep track of all GST transactions. Although it's generally viewed as a liability account, it may have either a credit balance (liability) or a debit balance (asset).

Analysis charts

Rather than repeating these four steps for every transaction, you can use an **analysis chart** to identify the double entry for ledger accounts.

The analysis chart in Figure 4.3 shows how to determine the double entry for a variety of financial transactions. In Figure 4.4, the actual ledger accounts are prepared, showing the double entry for each transaction.

Work through the analysis chart to check that you can make the correct double entry for each transaction. Notice that dates aren't used in Figure 4.4. Instead, the numbers where the date is usually recorded refer to the number of the transaction in the analysis chart (Figure 4.3).

analysis chart a table used to break a transaction down into debit and credit entries

Figure 4.3 Analysis chart

Transaction	Account names	Classification	Increase/ Decrease	Debit/Credit
1 The owner contributed \$25 000 to commence business	Cash at bank Capital	Asset Owner's equity	Increase Increase	Debit Credit
2 The business took out a loan for \$10 000	Cash at bank Loan	Asset Liability	Increase Increase	Debit Credit
3 Purchased a computer for \$3000 cash, plus GST of \$300	Computer GST clearing Cash at bank	Asset Liability Asset	Increase Decrease Decrease	Debit Debit Credit
4 Made a loan repayment of \$1000	Loan Cash at bank	Liability Asset	Decrease Decrease	Debit Credit
5 Bought inventory for \$600 cash, plus GST of \$60	Inventory GST clearing Cash at bank	Asset Liability Asset	Increase Decrease Decrease	Debit Debit Credit
6 The owner contributed an office desk worth \$800 to the business	Office furniture Capital	Asset Owner's equity	Increase Increase	Debit Credit

Note the entries that involve GST. As there are two debits, the credit in the Cash at Bank account can be combined to show both accounts (e.g. Computer/GST Clearing).

The Inventory account is used to record all movements of inventory in and out of the business during a period. All purchases of inventory are recorded on the debit side of the account.

Figure 4.4 General ledger accounts

CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
1	Capital	25 000	3	Computer/GST clearing	3 300
2	Loan	10 000	4	Loan	1 000
			5	Inventory/GST clearing	660

CAPITAL					
Date	Cross-reference	\$	Date	Cross-reference	\$
			1	Cash at bank	25 000
			6	Office furniture	800

LOAN					
Date	Cross-reference	\$	Date	Cross-reference	\$
4	Cash at bank	1 000	2	Cash at bank	10 000

COMPUTER					
Date	Cross-reference	\$	Date	Cross-reference	\$
3	Cash at bank	3 000			

GST CLEARING					
Date	Cross-reference	\$	Date	Cross-reference	\$
3	Cash at bank	300			
5	Cash at bank	60			

INVENTORY					
Date	Cross-reference	\$	Date	Cross-reference	\$
5	Cash at bank	600			

OFFICE FURNITURE					
Date	Cross-reference	\$	Date	Cross-reference	\$
6	Capital	800			

Always use the full title when recording GST: 'GST clearing' is the correct term. Don't abbreviate this title on any assessment.

The loan account, being a liability account, will be decreased by debit entries and increased by credit entries.

Assets are always increased by debit entries.

EXAM-STYLE QUESTION

Consider the following general ledger accounts.

GST CLEARING

Date	Cross-reference	\$	Date	Cross-reference	\$
1	Cash at bank	200	2	Cash at bank	300
			3	Accounts receivable	400

CAPITAL

Date	Cross-reference	\$	Date	Cross-reference	\$
			4	Vehicle	30 000

State the name of the relevant source document for each of the transactions numbered 1 to 4 in the above two ledger accounts. (4 marks)

Sample answer

Transaction number	Source document
1	EFT copy
2	Cash receipt/EFT copy/EFTPOS copy
3	Sales invoice
4	Office memo

Exam advice

Accounting exams will often include business documents. Make sure that you are aware of the various documents businesses use. It is important to learn the double entries made in ledger accounts from these documents and to be aware of their links to entries in the general ledger. Always read the questions carefully and establish the name of the business for which you are recording.

When dealing with credit transactions, *don't* identify the document as simply an 'invoice'. Be specific and state either a 'sales invoice' (for a credit sale) or a 'purchase invoice' (for a credit purchase).



4.2 Double entry for revenues and expenses

Having applied the rules of double entry to the three classifications of assets, liabilities and owner's equity, we can expand them to include the other two types of ledger accounts: revenues and expenses.

- **Revenues (R)** usually cause an increase in assets, leading to an increase in owner's equity.
- **Expenses (E)** usually cause a decrease in assets, leading to a decrease in owner's equity.

As revenue increases owner's equity, revenue accounts are credit in nature and are increased by credit entries. Expenses have the opposite effect on owner's equity: they are debit in nature and are increased by debit entries.

Figure 4.5 shows the table in Figure 4.2 expanded to include revenues and expenses.

Figure 4.5 Expanded rules for double entry (A, L, OE, R, E)

Account classification	Increased by	Decreased by
Assets	Debits	Credits
Liabilities	Credits	Debits
Owner's equity	Credits	Debits
Revenues	Credits	Debits
Expenses	Debits	Credits

The steps for determining the double entry for a transaction can also be followed for transactions involving revenues and expenses. The analysis chart in Figure 4.6 has been created using the same procedures, but this time some of the transactions involve revenue and expense items.

Figure 4.6 Analysis chart (including revenue and expenses)

Transaction	Account names	Classification	Increase/ Decrease	Debit/ Credit
1 The owner contributed \$40 000 to commence the business	Cash at bank	Asset	Increase	Debit
	Capital	Owner's equity	Increase	Credit
2 Bought inventory for \$5000 cash, plus GST of \$500	Inventory	Asset	Increase	Debit
	GST clearing	Liability	Decrease	Debit
	Cash at bank	Asset	Decrease	Credit
3 Bought inventory on credit for \$3000, plus GST of \$300	Inventory	Asset	Increase	Debit
	GST clearing	Liability	Decrease	Debit
	Accounts payable	Liability	Increase	Credit
4 Sold goods for \$1000 cash, plus GST of \$100 (cost price of goods sold \$600)	Cash at bank	Asset	Increase	Debit
	GST clearing	Liability	Increase	Credit
	Sales	Revenue	Increase	Credit
	and			
	Cost of sales	Expense	Increase	Debit
5 Paid accounts payable for inventory bought previously \$3300	Accounts payable	Liability	Decrease	Debit
	Cash at bank	Asset	Decrease	Credit
6 Sold goods on credit for \$2000, plus GST of \$200 (cost of sales \$800)	Accounts receivable	Asset	Increase	Debit
	GST clearing	Liability	Increase	Credit
	Sales	Revenue	Increase	Credit
	and			
	Cost of sales	Expense	Increase	Debit
7 Paid wages \$500	Wages	Expense	Increase	Debit
	Cash at bank	Asset	Decrease	Credit

Figure 4.7 shows how the double entries in Figure 4.6 would be recorded in ledger accounts.

Figure 4.7 General ledger accounts

CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
1	Capital	40 000	2	Inventory/GST clearing	5 500
4	Sales/GST clearing	1 100	5	Accounts payable	3 300
			7	Wages	500

The Cash at Bank account is increased by debit entries and decreased by credit entries.

CAPITAL					
Date	Cross-reference	\$	Date	Cross-reference	\$
			1	Cash at bank	40 000

ACCOUNTS PAYABLE					
Date	Cross-reference	\$	Date	Cross-reference	\$
5	Cash at bank	3 300	3	Office furniture/GST clearing	3 300

OFFICE FURNITURE					
Date	Cross-reference	\$	Date	Cross-reference	\$
3	Accounts payable	3 000			

SALES					
Date	Cross-reference	\$	Date	Cross-reference	\$
			4	Cash at bank	1 000
			6	Accounts receivable	2 000

OFFICE FURNITURE					
Date	Cross-reference	\$	Date	Cross-reference	\$
3	Accounts payable	2 000			

INVENTORY					
Date	Cross-reference	\$	Date	Cross-reference	\$
2	Cash at bank	5 000	4	Cost of sales	600
			6	Cost of sales	800

Inventory, classified as an asset account, is increased by debit entries and decreased by credit entries.

COST OF SALES					
Date	Cross-reference	\$	Date	Cross-reference	\$
4	Inventory	600			
6	Inventory	800			



GST CLEARING

Date	Cross-reference	\$	Date	Cross-reference	\$
2	Cash at bank	500	4	Cash at bank	100
3	Accounts payable	300	6	Accounts receivable	200

When a business makes a sale, the liability to the ATO is increased by a credit entry. When a business makes a purchase, the liability to the ATO is decreased by a debit entry.

ACCOUNTS RECEIVABLE

Date	Cross-reference	\$	Date	Cross-reference	\$
6	Sales/GST clearing	2 200			

WAGES

Date	Cross-reference	\$	Date	Cross-reference	\$
7	Cash at bank	500			

The Inventory account

Whenever a business purchases inventory, it must make a debit entry to the Inventory account, as it represents an increase in an asset. The corresponding credit will go in either the Cash at Bank account (for a cash purchase) or the Accounts Payable account (for a credit purchase).

When goods are sold, the economic resource of inventory has been sacrificed and so the asset becomes an expense. The double entry required is a debit to the Cost of Sales account (to increase the expense) and a credit to Inventory (to decrease the asset).

Note that one double entry is required to record a purchase of inventory, but *two* double entries are necessary whenever inventory is sold. This is because there are actually two events:

- The business earns revenue through the sale of goods.
- The business sacrifices inventory (an asset) to earn its sales.

The first double entry is made to record the selling price of the goods to the customer by the business. The benefit gained by the business is the value the goods are sold for; this must be credited to the revenue account (i.e. the Sales account). The Cash at Bank account is debited for a cash sale, or the Accounts Receivable account is debited if the sale was on credit. Regardless of whether it is a cash or a credit sale, you must always credit the GST Clearing account when a sale is made.

The second entry records the cost price of the goods sold. Some of the business's inventory has been sacrificed in order to earn revenue, so the cost of the goods sold is transferred from the Inventory account (an asset) to the Cost of Sales account (an expense).

This matches the definitions of the accounting elements; revenue results in an increase in an asset (Cash at Bank or Accounts Receivables) and the relevant expense is the current asset being used up or consumed to make the sale (Cost of Sales).

The rules of double entry remain consistent for all businesses, regardless of their size or structure.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [4.1]** Double entry accounting notes that every transaction affects two items, and so two accounts need to be updated – one with a debit and one with a credit. The transactions during each reporting period are recorded in ledger accounts. These individual accounts, when combined, make up the general ledger.
- [4.1]** The three elements of a ledger entry are the date of the transaction, a cross-reference to the other account affected by the transaction, and the dollar value of the transaction. Assets appear on the left side of the ledger and are debits. Liabilities and owner's equity appear on the right side and are credits.
- [4.1]** Analysis charts provide an analysis of a financial transaction, leading to the double entry being determined for ledger accounts.
- [4.2]** Expenses and revenues can also be recorded in double entry accounting. Revenue accounts are increased by credit entries; expense accounts are increased by debit entries.
- [4.2]** Whenever inventory is purchased, a debit entry is made to the Inventory account and a credit goes into the Cash at Bank or Accounts Payable account. When goods are sold, a debit is made to the Cost of Sales account and a credit goes to Inventory.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Analysis chart (A, L, OE)

Prepare an analysis chart (A, L, OE only) showing the double entries that result from the following transactions for Beckford's Stationery:

- Owner contributed cash to the business.
- Purchased office furniture for cash, including GST.
- Bought inventory on credit from OK Wholesalers, including GST.
- Borrowed money from NAB.
- Bought inventory for cash from United Distributors, plus GST.
- Made a repayment to OK Wholesalers by EFT.
- Owner contributed an office desk to the business.

2 Analysis chart (all accounts)

The following transactions are from the business of Games Galaxy. Prepare an analysis chart (all accounts) showing the double entry for each transaction.

- Paid monthly rent, plus GST.
- Bought goods for cash, plus GST.
- Issued a quote to supply a cafe with eight board games, including charging GST.
- Sold goods for cash, plus GST.
- Bought inventory items on credit, plus GST.
- Paid for advertising using the bank's EFT facility, including GST.
- Issued invoices to customers, including GST, for goods provided.
- Sent an order form to a supplier for goods required.
- Paid accounts payable an amount owing for inventory purchases.
- Received money from accounts receivable for goods supplied last month.



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3 Analysis chart with dollar values

Anthony Taranto is the owner of Taranto's Guitars, a trading business that sells both acoustic and electric guitars. He has provided a summary of transactions relating to his business:

- Taranto banked \$150 000 cash in a business account to start his business.
- Paid the first month's rent: \$9000, plus GST of \$900.
- Bought shop fittings for cash: \$22 000, plus \$2200 GST.
- Purchased guitars for \$34 000 on credit from Teknik Music Co. (charged \$3400 GST).
- Sold guitars that cost \$4000 for \$7900 EFT, plus GST of \$790.
- Paid for one month's advertising: \$1800, plus GST of \$180.
- Borrowed cash from NAB: \$15 000.
- Sold guitars on credit for \$3080, including GST of \$280, to DJ Touma (cost price of sale \$1600).
- Purchased inventory for cash from Shaggy Music Company: \$6600, plus GST of \$660.
- Repaid NAB \$2000.
- Cash sales of inventory totalled \$4400, including GST of \$400 (cost price \$2200).

Prepare an analysis chart for these transactions, including the two double entries required whenever the business sells inventory.



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4 Analysis chart with dollar values

Luisa Lipsia owns and operates Perfect Perfumes, an online business that sells perfumes and other cosmetics. She provides the following summary of transactions relating to her business:

- Lipsia banked \$106 000 cash to start the business.
- Purchased inventory on credit from Exotic Cosmetics for \$16 500, including GST of \$1500.
- Bought office equipment for cash for \$14 000, plus GST.
- Paid for advertising in local papers: \$500 cash, plus GST.
- Sold goods for \$1100, including GST, for cash. Goods were sold at a mark-up of 100%.
- Made a credit sale for \$2000, plus GST of \$200. The cost price of the goods sold was \$980.
- Paid Exotic Cosmetics the full amount owing by making an EFT.
- Bought goods for cash: \$500 plus GST.
- Took out a loan from ACME Bank for \$5000, with 5% interest on the loan to be paid yearly.
- Lipsia contributed two filing cabinets to the business, valued at \$200.
- Collected \$500 from accounts receivable via EFT.

Prepare an analysis chart for these transactions, including the two double entries required whenever the business sells inventory.

5 Analysis of ledger accounts

The following accounts appeared in the general ledger of St Albans Auto Parts, a small business owned and operated by Mitch Harding.

CASH AT BANK

		\$			\$
1 Apr	Capital	30 000	2 Apr	Fittings/GST clearing	16 500
4 Apr	Sales/GST clearing	660	3 Apr	Inventory/GST clearing	3 300

CAPITAL - HARDING

		\$			\$
			1 Apr	Cash at bank	30 000

FITTINGS

		\$			\$
2 Apr	Cash at bank	30 000			

GST CLEARING

		\$			\$
2 Apr	Cash at bank	1 500	4 Apr	Cash at bank	60
3 Apr	Cash at bank	300	6 Apr	Accounts receivable	10
5 Apr	Accounts payable	40			

INVENTORY

		\$			\$
3 Apr	Cash at bank	3 000	4 Apr	Cost of sales	300
5 Apr	Accounts payable	400	6 Apr	Cost of sales	60

COST OF SALES

		\$			\$
4 Apr	Inventory	300			
6 Apr	Inventory	60			

SALES

		\$			\$
			4 Apr	Cash at bank	600
			6 Apr	Accounts receivable	100

ACCOUNTS PAYABLE

		\$			\$
			5 Apr	Inventory/GST clearing	440

ACCOUNTS RECEIVABLE

		\$			\$
6 Apr	Sales/GST clearing	110			

In chronological order, list the transactions that resulted in the double entries in these ledger accounts.



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6 Analysis of ledger accounts

Cara Johnson owns Caulfield Cosplay, a small business that sells costumes.

CASH AT BANK

		\$			\$
1 May	Capital	190 000	3 May	Display equipment/ GST clearing	22 000
5 May	Sales/GST clearing	1 320	4 May	Advertising/GST clearing	660

CAPITAL - JOHNSON

		\$			\$
			1 May	Cash at bank	190 000

DISPLAY EQUIPMENT

		\$			\$
3 May	Cash at bank	20 000			

GST CLEARING

		\$			\$
2 May	Accounts payable	1 500	5 May	Cash at bank	120
3 May	Cash at bank	2 000	6 May	Accounts receivable	140
4 May	Cash at bank	60			

INVENTORY

		\$			\$
2 May	Accounts payable	15 000	5 May	Cost of sales	500
			6 May	Cost of sales	600

ADVERTISING

		\$			\$
4 May	Cash at bank	600			

SALES

		\$			\$
			5 May	Cash at bank	1 200
			6 May	Accounts receivable	1 400

COST OF SALES

		\$			\$
5 May	Inventory	500			
6 May	Inventory	600			

ACCOUNTS PAYABLE

		\$			\$
			2 May	Inventory/GST clearing	16 500

ACCOUNTS RECEIVABLE

		\$			\$
6 May	Sales/GST clearing	1 540			

- State the transactions that resulted in the double entries in these ledger accounts.
- Consider the GST account shown. On 6 May, does this business owe GST to the ATO, or would it be owed a refund? Explain your answer fully.

ETHICAL CONSIDERATIONS

For several years the owner of Galaxy Games, Daniel Galati, has provided plastic carry bags to his customers. The bags are in distinctive colours, with the name of the business clearly displayed. As Daniel's business is in a large regional shopping centre, he has always believed the bags are a great advertising tool for his shop.

Some of Daniel's customers have commented to him recently on the environmental impact of plastic bags and he wants to explore possible alternatives. His choices include:

- continue to use the plastic bags
- reduce the number of plastic bags used by charging his customers \$1 per bag
- replace the plastic bags with paper bags
- discontinue the use of bags and encourage customers to bring their own bag.

Daniel has asked for your advice, including the possible consequences of his decision. Write a report, discussing the possible implications of each choice. Your report should include a recommendation to Daniel, justifying your decision.

EXAM-STYLE QUESTIONS

Question 1 (5 marks)

Brad Faulkner, the owner of Mooroopna IT Supplies, has provided the following details of his recent transactions:

Apr 1	Bought inventory for cash \$2200, including GST
2	Sold goods on credit \$4000, plus GST
3	Made an EFT and paid for advertising \$715, including GST
4	Made a cash sale for \$1320, including GST
5	Purchased inventory on credit and was charged \$1500, plus GST.

Prepare the relevant entries from the above information in the GST Clearing account for Mooroopna IT Supplies.

Question 2 (3 marks)

The owner of Rosebud Orthopaedics, Ellie French, has a GST liability on 1 May 2028. During May, Ellie sold goods for a total of \$15 400, including GST. All sales made by her business were on a cash basis. The cost price of the goods sold during May was \$7500.

Complete the following table to show the effect of the above transactions on the accounting equation of Ellie's business.

	Increase/Decrease/No effect	\$
Assets		
Liabilities		
Owner's equity		



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



The general journal and the general ledger

KEY TERMS

Balancing an account
Trial balance
Drawings

This chapter focuses on the link between business documents and the system of general ledger accounts. The general journal records transactions on a daily basis. It names the accounts affected and records the numbers of the business documents being used. Entries are then made in the general ledger using the rules of double entry.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the purpose of a general journal [5.1]
- **record** financial transactions in the general journal [5.1]
- **explain** the purpose of the general ledger [5.1]
- **record** financial transactions in general ledger T-form accounts [5.1]
- formally **balance** a T-form ledger account [5.2]
- **describe** the purpose of a trial balance and **prepare** one from a general ledger [5.3]
- **use** a trial balance to identify particular recording errors [5.3]
- **outline** the errors a trial balance won't detect [5.3]
- **record** drawings in the general ledger and **show** their effect on owner's equity [5.5]

PRIOR KNOWLEDGE

CHAPTER 3 Accounting systems and business documents

CHAPTER 4 Double entry recording: An introduction



Estimated time required: 2 weeks



5.1 From documents to ledger accounts



Now that you are familiar with the basic rules of debits and credits in ledger accounts, you are ready to learn how to record transactions in a formal double entry system.

The full system of double entry accounting was shown as a flow diagram in Chapter 3 (Figure 3.13). Part of that diagram is shown in Figure 5.1 to remind you of the steps involved.

Figure 5.1 The start of double entry recording



Financial transactions are recorded in business documents. These documents are issued and received as part of the day-to-day activities of the business. The details of all documents must be recorded daily in the general journal, which is sometimes known as a day book. (Remember that journals and ledgers can be physical or digital.)

The debit and credit entries required when a document is issued or received are made in the general journal first. The journal records all the details of the transaction. These details include four key items:

- the names of the accounts affected by the transaction
- the dollar amounts involved
- a description of the transaction
- the number of the document used to provide all the above details.

Consider the general journal entry in Figure 5.2, which shows the result of a business owner contributing \$100 000 on 1 March to commence their business. The evidence of this transaction was provided by Memo 001.

Figure 5.2 General journal entry to commence business

Date	Details	Dr	Cr
1 Mar	Cash at bank	100 000	
	Capital		100 000
	Cash contribution by owner to commence business (Memo 001)		

The two accounts affected by the transaction

'Dr' and 'Cr' are the traditional abbreviations for 'debit' and 'credit'.

The date of the transaction

The narration, which explains the nature of the transaction

The debit and credit entries

Regarding the four key items:

- 1 As the owner has contributed cash to the business, the two accounts affected are Cash at Bank and Capital.
- 2 The dollar amount involved was \$100 000, which results in an increase in Cash at Bank (an entry in the debit column) and in Capital (an entry in the credit column).
- 3 A brief description of the event is provided below the account names. This is known as a narration.
- 4 The narration includes a document number, which in this case is Memo 001.

Two traditions are usually followed when preparing a general journal entry:

- The debit entries are shown first, followed by the credit entries.
- The credit entries in a general journal are indented to the right.

For example, in Figure 5.2 'Capital' is indented in the details section.

Once the general journal entries have been compiled for a day, the debits and credits are posted to the general ledger accounts. 'Posting' means transferring the details of debits and credits (but not all the other details recorded) to the ledger accounts so accounts are updated quickly and accurately.

The general journal entry in Figure 5.2 would result in the following general ledger accounts.

CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
1 Mar	Capital	100 000			

CAPITAL					
Date	Cross-reference	\$	Date	Cross-reference	\$
			1 Mar	Cash at bank	100 000

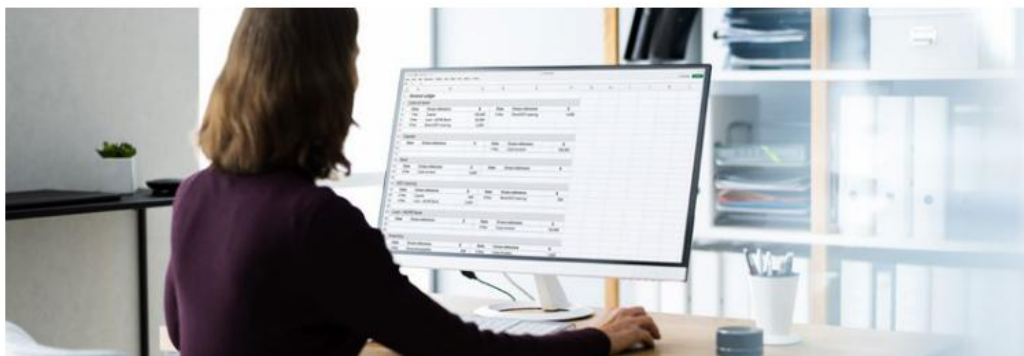
The Cash at Bank account has increased with a debit entry, and the cross-reference noted is the Capital account. This cross-reference helps to explain the nature of the cash receipt – the owner has injected capital into the business.

Similarly, the Capital account has a credit entry, with the cross-reference being Cash at Bank. The cross-reference shows which asset was contributed by the owner (cash).

As a reporting period continues, day-to-day events are entered into the general journal and then posted to ledger accounts. This means that all the transactions of the business will end up being noted in the general journal, along with the relevant document numbers.

The general ledger is then updated on a regular basis (preferably daily), so that relevant financial information is available to the owner or manager in a *timely* manner, satisfying two of the key qualitative characteristics of accounting.

The general ledger should be updated daily.



Recording in the general journal

Following on from the previous example, this business owner conducts several more transactions at the start of March.

Mar	1	The owner contributed \$100 000 to commence business (Memo 001)
	2	Paid rent for the first month: \$4000, plus GST of \$400 (EFT rec. 4501)
	3	Borrowed \$20 000 over five years from Acme Bank (EFT)
	4	Bought inventory on credit for \$33 000, including GST of \$3000 (Invoice 546)
	5	Sold goods for cash: \$2000, plus GST of \$200 (cost price of sale \$1000) (Receipt 5001)

The general journal entries resulting from these five transactions are shown in Figure 5.3.

Figure 5.3 General journal entries

Date	Details	Dr	Cr
1 Mar	Cash at bank	100 000	
	Capital		100 000
	Cash contribution by owner to commence business (Memo 001)		
2 Mar	Rent	4 000	
	GST clearing	400	
	Cash at bank		4 400
	Paid rent (EFT rec. 4501)		
3 Mar	Cash at bank	20 000	
	Loan – ACME Bank		20 000
	Five-year loan taken out (EFT)		
4 Mar	Inventory	30 000	
	GST clearing	3 000	
	Accounts payable		33 000
	Bought inventory on credit (Invoice 546)		
5 Mar	Cost of sales	1 000	
	Inventory		1 000
	Cash at bank	2 200	
	Sales		2 000
	GST clearing		200
	Sold goods for cash (Receipt 5001)		

When preparing general journal entries, always check that your total debits are equal to the total credits.

The general journal is extremely flexible; it can be used to record any type of transaction. It relies on the user knowing the rules of double entry accounting, and simply states the debits and credits for every transaction.

Figure 5.4 shows how the entries prepared in the general journal are posted to the relevant ledger accounts.

Figure 5.4 General ledger entries

All inflows of cash are shown as debit entries, as they increase the bank account.

All outflows of cash are shown as credit entries, as they decrease the bank account.

CASH AT BANK

Date	Cross-reference	\$	Date	Cross-reference	\$
1 Mar	Capital	100 000	2 Mar	Rent/GST clearing	4 400
3 Mar	Loan – ACME Bank	20 000			
5 Mar	Sales/GST clearing	2 200			

CAPITAL

Date	Cross-reference	\$	Date	Cross-reference	\$
			1 Mar	Cash at bank	100 000

RENT

Date	Cross-reference	\$	Date	Cross-reference	\$
2 Mar	Cash at bank	4 000			

GST CLEARING

Date	Cross-reference	\$	Date	Cross-reference	\$
2 Mar	Cash at bank	400	5 Mar	Cash at bank	200
4 Mar	Accounts payable	3 000			

LOAN – ACME BANK

Date	Cross-reference	\$	Date	Cross-reference	\$
			3 Mar	Cash at bank	20 000

INVENTORY

Date	Cross-reference	\$	Date	Cross-reference	\$
4 Mar	Accounts payable	30 000	5 Mar	Cost of sales	1 000

COST OF SALES

Date	Cross-reference	\$	Date	Cross-reference	\$
5 Mar	Inventory	1 000			

ACCOUNTS PAYABLE

Date	Cross-reference	\$	Date	Cross-reference	\$
			4 Mar	Inventory/GST clearing	33 000

SALES

Date	Cross-reference	\$	Date	Cross-reference	\$
			5 Mar	Cash at bank	2 000

5.2 Balancing ledger accounts



Ledger accounts may contain debits and credits from many transactions. The balance of a particular account is the difference between the total debit entries and the total credit entries in that account. If an account has debit entries totalling \$10 000 and credit entries of \$9 000, the balance of the account is \$1 000 debit. An account with debits of \$350 and credits of \$400 would have a credit balance of \$50.

A formal process of **balancing an account** should be done if it has more than one entry. Accounts are balanced at the end of a reporting period (i.e. on balance day) to determine what is included in the balance sheet. When an account is balanced, the balancing procedure becomes part of the firm's permanent records.

Figure 5.5 shows the formal balancing of a Cash at Bank account, prepared for the month of March 2028.

balancing an account entering a missing figure on one side of a ledger account to bring it to the total on the other side

Figure 5.5 Balancing a ledger account

CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
2028			2028		
1 Mar	Capital	50 000	2 Mar	Rent/GST clearing	1 100
6 Mar	Sales/GST clearing	1 100	9 Mar	Advertising/GST clearing	440
12 Mar	Sales/GST clearing	2 200	14 Mar	Wages	1 800
18 Mar	Sales/GST clearing	2 200	26 Mar	Inventory/GST clearing	11 000
25 Mar	Loan	10 000	30 Mar	Insurance/GST clearing	660
29 Mar	Sales/GST clearing	5 500	31 Mar	Balance	56 000
		71 000			71 000
1 Apr	Balance	56 000			

The balance figure is the 'missing figure' and should be the last entry made to a ledger account. This is then carried down to the opposite side of the account.

This account is balanced as follows:

- The two sides of the ledger account are totalled, and the larger amount (\$71 000) is written on both sides of the account.
- On the side with the lower total (the credit side, in this case), the difference between the two sides (\$56 000) is entered as the balance.
- Once this balancing figure is entered, the two sides are now equal and the account is ruled off as balanced.
- The balancing figure was entered on the credit side, so it's carried down to the opposite side of the account. The Cash at Bank account now has a debit balance of \$56 000.

The final balance is carried down on the last day of the reporting period – 31 March, in this example. This amount would appear as a current asset in the firm's balance sheet for 31 March 2028. The balance in the ledger account is then ready for the new reporting period, and therefore is an opening balance as at 1 April 2028.



Balancing an account means making sure both sides of the ledger add up to the same amount, with the balancing figure being carried forward to the new period.

The procedure is exactly the same if an account has a credit balance (i.e. the total credit entries exceed the total debits). The missing figure appears on the debit side and is carried down to the credit side of the account. Figure 5.6 shows a loan account (liability).

Figure 5.6 Balancing a ledger account (credit balance)

LOAN					
Date	Cross-reference	\$	Date	Cross-reference	\$
2028			2028		
31 Mar	Cash at bank	500	1 Jan	Balance	6 000
30 Jun	Cash at bank	500			
30 Sep	Cash at bank	500			
31 Dec	Cash at bank	500			
31 Dec	Balance	4 000			
		6 000			6 000
			2029		
			1 Jan	Balance	4 000

In this account, the missing figure is on the debit side of the account, which is then carried down to the credit side.

This account shows \$6000 owing as at 1 January 2028. Four quarterly repayments were made during the year, and the account was balanced at 31 December 2028 to show that a liability of \$4000 still exists. This amount would be reported in the business's balance sheet at this date.



5.3 The role of the trial balance

trial balance a list of general ledger accounts with their balances; used to check that the total value of all debits equals the value of all credits

During a reporting period, there may be hundreds or thousands of transactions resulting in debits and credits in ledger accounts. With such a large amount of recording, errors sometimes occur. A **trial balance** can be prepared during a reporting period, as well as at the end, to identify errors in double entry recording. It lists all the general ledger accounts with their balances on a specific date.

Figure 5.7 shows an example of a trial balance for Modica's Motorbikes.

Figure 5.7 Trial balance showing general ledger account balances

MODICA'S MOTORBIKES: TRIAL BALANCE AS AT 30 JUNE 2028		
	Dr	Cr
Accounts payable		1 000
Accounts receivable	2 000	
Advertising	1 000	
Capital		9 000
Cash at bank	2 000	
Cost of sales	4 000	
GST clearing		1 000
Inventory	8 000	
Sales		9 000
Wages	3 000	
	20 000	20 000

Your trial balance totals should always be the same, as total debits must equal total credits.

Figure 5.8 It is vital that the totals in a trial balance are the same, before proceeding to final financial reports



A trial balance is used to check that the total of all debit entries is equal to the total of all credit entries. It doesn't detect all errors – only those where the debits don't equal the credits.

A trial balance won't detect the following errors:

- An incorrect amount is entered for both debit and credit (e.g. entering \$98 in both accounts, instead of \$89).
- A debit or credit is entered in the wrong account (e.g. a rent payment is debited to the Wages account).
- The debit and credit entries are reversed – the account that should have been debited is credited, and vice versa.
- A transaction is omitted completely – neither the debit nor the credit is entered.
- There are compensating errors – two recording errors occur, but they counteract one another. The result is that the trial balance is in balance by sheer good luck!

A trial balance will detect some errors in a business's accounts, but not all.

None of these errors will be detected by preparing a trial balance, because they all comply with the rules of double entry – a debit for every credit for each transaction. However, a trial balance should still be prepared regularly to detect errors that *don't* comply with the rules.

Detecting errors through a trial balance

A trial balance won't balance if double entry accounting hasn't been completed properly. The cause of the problem must then be found. Errors occur for many reasons, but some common errors are easily detected (see Figure 5.9 and Table 5.1).

Figure 5.9 Common trial balance errors

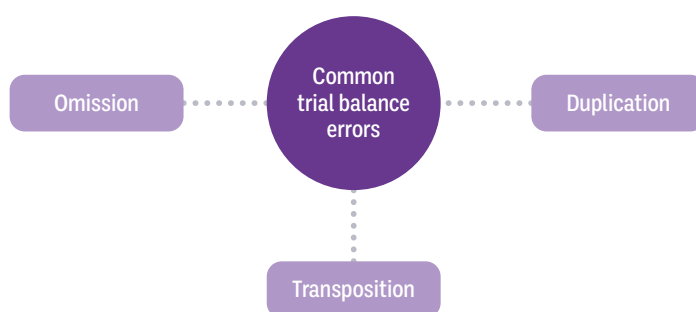


Table 5.1 Finding and correcting trial balance errors

Debit or credit omitted	When a trial balance doesn't balance, calculate the difference between the total debits and the total credits. Check this figure against the transactions recorded for the period in the general journal. This will detect a single error where one debit or one credit has been omitted.
Duplication of a debit or credit	Two debits or two credits are sometimes made for one transaction. In this case, you can find the error by calculating the difference in the trial balance totals and dividing by two. For example, if wages of \$2000 were paid, the correct double entry is a debit to Wages and a credit to Cash at Bank. If both accounts were debited, the total debits in the trial balance will be \$4000 higher than the credit side, because the Cash at Bank account was debited when it should have been credited. Not only is the \$2000 credit missing, but an incorrect \$2000 debit was also made.
Transposing errors	You can locate a third type of error by checking whether the difference in the trial balances is divisible by nine. This will identify a transposing error, where a dollar value has been incorrectly copied into a ledger account. For example, a figure of \$197 is entered as \$179 in one account. The difference in the trial balance due to this error would be \$18, which is exactly divisible by nine.

Transposing errors are more likely to occur with larger numbers. For example, a figure of \$12 540 may be entered as \$12 450. The difference in this case is \$90, which again is exactly divisible by nine.

These methods don't guarantee that all mistakes will be easily located in ledger accounts. If several recording errors are made, these techniques won't be useful.

If you use all three methods and still can't identify the error, there may be multiple recording errors. You will need to check each double entry against the transaction data.

Alternative presentation of a trial balance

There are two acceptable methods of displaying the ledger account information in a trial balance. The method used to prepare the trial balance in Figure 5.7 (page 86) is one standard approach.

The other method groups together all the accounts with debit balances and all the accounts with credit balances. This method, which uses a 'T' to distinguish between accounts with debit and credit balances, is shown in Figure 5.10. Both methods are acceptable, so use whichever you prefer.

Figure 5.10 T-format trial balance

MODICA'S MOTORBIKES: TRIAL BALANCE AS AT 30 JUNE 2028			
	\$		\$
Accounts receivable	2 000	Accounts payable	1 000
Advertising	1 000	Capital	9 000
Cash at bank	2 000	GST clearing	1 000
Cost of sales	4 000	Sales	9 000
Inventory	8 000		
Wages	3 000		
	20 000		20 000

EXAM-STYLE QUESTION

Explain the purpose of a trial balance.

(2 marks)

Sample answer

A trial balance is prepared at the end of a period to check that the total of the debit entries is equal to the total of the credit entries. This is done to identify if there have been any recording errors made during the period. Note, however, that the trial balance doesn't identify all recording errors. It simply checks that debits equal credits.

Exam advice

This type of question has been used on many exams. You should be aware of the roles played by the various parts of the double entry accounting system – the general journal, the general ledger and the trial balance – and the purpose of the key accounting reports.

Don't confuse the role of the trial balance with that of the income statement or balance sheet. The trial balance simply checks that debits equal credits. It *doesn't* show how the business is performing or what its profit or loss is.

5.4 Extended example: From transactions to balance sheet



This extended example shows the system of recording transactions in the general journal, posting the entries to general ledger accounts, then preparing a trial balance and accounting reports.

The following transactions take place during the month of March 2028. They all relate to Fuller Furniture, a small business owned and operated by Harrison Fuller.

The transactions are entered into the business's general ledger and a trial balance is prepared as at 31 March 2028. From the trial balance, an income statement and balance sheet are then prepared.

FULLER FURNITURE: TRANSACTIONS

Mar	1	Fuller deposited \$80 000 in a separate bank account to commence the business
	2	Purchased inventory for cash: \$10 000, plus GST of \$1000
	3	Purchased a delivery van: \$15 000 cash, plus GST of \$1500
	4	Paid rent for the first month: \$1500, plus GST of \$150
	6	Paid advertising: \$500, plus GST of \$50
	8	Purchased inventory on credit from Better Furniture: \$1200, plus GST of \$120
	11	Cash sales made to customers: \$3000, plus GST of \$300 (cost price \$1500)
	17	Charged D Colaco \$500, plus GST of \$50, for bar stools sold on credit (cost price \$300)
	21	Received from cash clients: \$800 for sales, plus GST of \$80 (cost price \$400)
	24	Invoiced P Connop \$500, plus GST of \$50 for recliner chair (cost price \$200)
	25	Received \$550 from D Colaco on account
	28	Received \$900, plus GST of \$90, from cash clients (cost price \$450)
	29	Paid advertising: \$500, plus GST of \$50
	30	Paid Better Furniture \$200

FULLER FURNITURE: GENERAL JOURNAL

Date	Details	Dr	Cr
1 Mar	Cash at bank	80 000	
	Capital		80 000
	Cash contribution by owner to commence business		
2 Mar	Inventory	10 000	
	GST clearing	1 000	
	Cash at bank		11 000
	Bought inventory for cash		
3 Mar	Delivery van	15 000	
	GST clearing	1 500	
	Cash at bank		16 500
	Bought delivery van for cash		
4 Mar	Rent	1 500	
	GST clearing	150	
	Cash at bank		1 650
	Paid rent		
6 Mar	Advertising	500	
	GST clearing	50	
	Cash at bank		550
	Paid advertising		
8 Mar	Inventory	1 200	
	GST clearing	120	
	Accounts payable – Better Furniture		1 320
	Bought inventory on credit		
11 Mar	Cost of sales	1 500	
	Inventory		1 500
	Cash at bank	3 300	
	Sales		3 000
	GST clearing		300
	Sold goods for cash		
17 Mar	Cost of sales	300	
	Inventory		300
	Accounts receivable – D Colaco	550	
	Sales		500
	GST clearing		50
	Sold goods on credit		
21 Mar	Cost of sales	400	
	Inventory		400
	Cash at bank	880	
	Sales		800
	GST clearing		80
	Sold goods for cash		
24 Mar	Cost of sales	250	
	Inventory		250
	Accounts receivable – P Connop	660	
	Sales		600
	GST clearing		60
	Sold goods on credit		





25 Mar	Cash at bank	550	
	Accounts receivable – D Colaco		550
	Cash received on account		
	Cost of sales	450	
	Inventory		450
	Cash at bank	990	
	Sales		900
	GST clearing		90
	Sold goods for cash		
	Advertising	500	
	GST clearing	50	
	Cash at bank		550
	Paid advertising		
	Accounts payable – Better Furniture	200	
	Cash at bank		200
	Cash paid on account		

Once all the transactions for March are recorded in the general journal, they are posted to the general ledger accounts.

FULLER FURNITURE: GENERAL LEDGER

CASH AT BANK

Date	Cross-reference	\$	Date	Cross-reference	\$
2028			2028		
1 Mar	Capital	80 000	2 Mar	Inventory/GST clearing	11 000
11 Mar	Sales/GST clearing	3 300	3 Mar	Delivery van/GST clearing	16 500
21 Mar	Sales/GST clearing	880	4 Mar	Rent/GST clearing	1 650
25 Mar	Accounts receivable – D Colaco	550	6 Mar	Advertising/GST clearing	550
28 Mar	Sales/GST clearing	990	29 Mar	Advertising/GST clearing	550
			30 Mar	Accounts payable – Better Furniture	200
			31 Mar	Balance	55 270
		85 720			85 720
1 Apr	Balance	55 270			

CAPITAL

Date	Cross-reference	\$	Date	Cross-reference	\$
			1 Mar	Cash at bank	80 000

INVENTORY

Date	Cross-reference	\$	Date	Cross-reference	\$
2 Mar	Cash at bank	10 000	11 Mar	Cost of sales	1 500
8 Mar	Accounts payable – Better Furniture	1 200	17 Mar	Cost of sales	300
			21 Mar	Cost of sales	400
			24 Mar	Cost of sales	250
			28 Mar	Cost of sales	450
			31 Mar	Balance	8 300
		11 200			11 200
1 Apr	Balance	8 300			





COST OF SALES

Date	Cross-reference	\$	Date	Cross-reference	\$
11 Mar	Cost of sales	1 500			
17 Mar	Cost of sales	300			
21 Mar	Cost of sales	400			
24 Mar	Cost of sales	250			
28 Mar	Cost of sales	450	31 Mar	Balance	2 900
		2 900			2 900
1 Apr	Balance	2 900			

GST CLEARING

Date	Cross-reference	\$	Date	Cross-reference	\$
2 Mar	Cash at bank	1 000	11 Mar	Cash at bank	300
3 Mar	Cash at bank	1 500	17 Mar	Accounts receivable – D Colaco	50
4 Mar	Cash at bank	150	21 Mar	Cash at bank	80
6 Mar	Cash at bank	50	24 Mar	Accounts receivable – P Connop	60
8 Mar	Accounts payable – Better Furniture	120	28 Mar	Cash at bank	90
29 Mar	Cash at bank	50	31 Mar	Balance	2 290
		2 870			2 870
1 Apr	Balance	2 290			

DELIVERY VAN

Date	Cross-reference	\$	Date	Cross-reference	\$
3 Mar	Cash at bank	15 000			

RENT

Date	Cross-reference	\$	Date	Cross-reference	\$
4 Mar	Cash at bank	1 500			

ADVERTISING

Date	Cross-reference	\$	Date	Cross-reference	\$
6 Mar	Cash at bank	500			
29 Mar	Cash at bank	500	31 Mar	Balance	1 000
		1 000			1 000
1 Apr	Balance	1 000			

ACCOUNTS PAYABLE – BETTER FURNITURE

Date	Cross-reference	\$	Date	Cross-reference	\$
30 Mar	Cash at bank	200	8 Mar	Inventory/GST clearing	1 320
31 Mar	Balance	1 120			
		1 320			1 320
			1 Apr	Balance	1 120





SALES

Date	Cross-reference	\$	Date	Cross-reference	\$
			11 Mar	Cash at bank	3 000
			17 Mar	Accounts receivable – D Colaco	500
			21 Mar	Cash at bank	800
			24 Mar	Accounts receivable – P Connop	600
31 Mar	Balance	5 800	28 Mar	Bank	900
		5 800			5 800
			1 Apr	Balance	5 800

ACCOUNTS RECEIVABLE – D COLACO

Date	Cross-reference	\$	Date	Cross-reference	\$
17 Mar	Sales/GST clearing	550	25 Mar	Cash at bank	550

ACCOUNTS RECEIVABLE – P CONNOP

Date	Cross-reference	\$	Date	Cross-reference	\$
24 Mar	Sales/GST clearing	660			

The general ledger accounts shown have been balanced and the balances of all accounts are now available to prepare the trial balance. Note that the balance of 'Accounts receivable – D Colaco' is zero as of 31 March, as the total debits are exactly equal to the total credits. That account is therefore no longer listed in the trial balance.

FULLER FURNITURE: TRIAL BALANCE AS AT 30 JUNE 2028

	\$		\$
Cash at bank	55 270	Capital	80 000
Inventory	8 300	Accounts payable – Better Furniture	1 120
Cost of sales	2 900	Sales	5 800
GST clearing	2 290		
Delivery van	15 000		
Rent	1 500		
Advertising	1 000		
Accounts receivable – P Connop	660		
	86 920		86 920

The total debit entries equal the total credits, so the trial balance balances.

The double entry process has been done correctly, so the accounting reports can now be prepared. Of the five types of accounts used in the general ledger (A, L, OE, R, E), two are used for the income statement (R, E) and the other three are used for the balance sheet (A, L, OE).

As profit equals revenue less expenses, these items are used to prepare the income statement. This leaves the accounts that make up the accounting equation:

$$A = L + OE$$

FULLER FURNITURE: INCOME STATEMENT FOR MONTH ENDED 31 MARCH 2028

	\$	\$
Sales		5 800
Less: Cost of sales		2 900
Gross profit		2 900
Less: Other expenses		
Rent	1 500	
Advertising	1 000	2 500
Net profit		400

FULLER FURNITURE: BALANCE SHEET AS AT 31 MARCH 2028

Assets	\$	\$	Liabilities	\$	\$
Current assets			Current liabilities		
Cash at bank	55 270		Accounts payable – Better Furniture		1 120
Inventory	8 300				
GST clearing	2 290		Owner's equity		
Accounts receivable – P Connop	660	66 520	Capital	80 000	
Non-current assets			Net profit	400	80 400
Delivery van		15 000			
		81 520			81 520



5.5 Accounting for drawings

drawings a withdrawal of assets by the proprietor of a business

Drawings are classified within the owner's equity account, but they are the opposite of capital and are negative in nature. They require an entry opposite to that made when an owner puts capital into the business. When an owner withdraws an asset, the asset account involved is credited, with the debit entry being made in a Drawings account.

A cash withdrawal would be recorded as follows.

CASH AT BANK

Date	Cross-reference	\$	Date	Cross-reference	\$
			10 Jan	Drawings	500

DRAWINGS

Date	Cross-reference	\$	Date	Cross-reference	\$
10 Jan	Cash at bank	500			

At the end of a reporting period, the balance of the Drawings account is treated as a negative figure under the owner's equity section of the balance sheet.

For example, if the Capital account had a balance of \$50 000, the profit earned for the year was \$20 000 and the drawings during the period were \$10 000, the owner's equity would be calculated and reported as follows.

BALANCE SHEET (EXTRACT)

Owner's equity	\$	\$	\$
Capital	50 000		
Net profit	20 000	70 000	
Less: Drawings		10 000	60 000

Net profit increases the owner's equity, whereas drawings decrease owner's equity.



Practise and apply

5



REVISION: SUMMARY OF KEY CONTENT

- [5.1]** The general journal records all the key details of a transaction. The journal entry should show the accounts affected, the dollar amounts and the reference numbers of all related documents and should contain a brief description of the transaction.
- [5.1]** Once the general journal entries have been compiled, the debits and credits are posted (transferred) to the general ledger accounts.
- [5.2]** Following the core principle of double entry accounting, each transaction from the general journal should be recorded in at least two ledger accounts – one for credits and one for corresponding debits.
- [5.3]** Ledger accounts may contain debits and credits from many transactions. The balance of an account is the difference between the total debit entries and the total credit entries.
- [5.3]** Accounts should be balanced at the end of a reporting period. Balancing involves entering a missing figure on one side of a ledger account to bring it to the total on the other side.
- [5.3]** Preparing a trial balance during a reporting period helps to detect errors in double entry recording. A trial balance is used to check that the total of all debit entries is equal to the total of all credit entries.
- [5.5]** Drawings occur when the owner of the business withdraws assets for personal use. They require an entry opposite to that made when an owner puts capital into the business.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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XL template

1 Preparing the general journal

Nik Brudenell is the owner of Dreamy Daze Music Store. In his first week of trading, the following transactions took place.

Apr	1	Brudenell deposited \$120 000 to commence the business (Receipt 601)
	2	Paid rent of \$1200, plus GST of \$120 (EFT rec. 401)
	3	Purchased shop fittings from Seddon Furniture for \$17 600 cash, including GST (EFT rec. 402)
	4	Bought inventory for cash: \$10 000, plus GST of \$1000 (EFT rec. 403)
	5	Purchased inventory on credit from Top 40 Music: \$5000, plus GST (Invoice 989)

- Enter the above transactions into the general journal of Dreamy Daze Music Store.
- Prepare the Cash at Bank and GST Clearing general ledger accounts, including the relevant entries from the general journal.



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2 Preparing the general journal

Dave Congdon sells motorcycle parts in his business, which trades under the name of DC Bikes. On 1 March 2028, the following account balances existed:

- Cash at Bank: \$12 000
- Inventory: \$52 000
- Accounts Receivable: \$9800
- Accounts Payable: \$5400
- GST Clearing: \$1200 Cr
- Capital: \$67 200.

The following transactions took place in the first week of March 2028.

Mar	1	Paid advertising: \$440, including GST
	2	Sold goods on credit for \$4000, plus GST (cost price \$2200)
	3	Took out a loan from NAB: \$10 000
	4	Received cash from accounts receivable via EFT: \$2800
	5	Cash sales of \$3500, plus GST (cost of sales: \$1700)
	6	Paid accounts payable via EFT: \$2400
	7	Paid insurance: \$670, plus GST

- Prepare general journal entries to record the above transactions. (Narrations aren't required.)
- Prepare the following ledger accounts, including the relevant transactions from your general journal: Cash at Bank, Inventory, Cost of Sales and GST Clearing.
- Balance the four ledger accounts prepared in part **b**.

3 General journal to ledger accounts

Emma Robinson is the owner of Ambient Audio. The following transactions occurred in her first week of operations in 2028.

May 1	Robinson deposited \$145 000 in a separate bank account to set up the business (Memo 501) Purchased office furniture from Commercial Furniture for \$5200 cash, plus GST of \$520 (EFT rec. 300)
2	Bought shop fittings for cash: \$16 500 (including GST of \$1500) (EFT rec. 301) Paid the first month's rent: \$8000, plus GST of \$800 (EFT rec. 302)
3	Purchased inventory on credit for \$25 000, plus GST of \$2500 (Invoice 1919)
4	Cash sales: \$9000, plus GST of \$900 (cost price: \$5000) (EFT summary) Paid advertising of \$600, plus GST of \$60 (EFT rec. 303)
5	Issued an invoice for \$4800, plus GST of \$480, to Swinburne University for goods provided (cost price: \$2400) (Invoice 001)
6	Cash sales: \$1540, including GST of \$140 (cost price: \$700) (EFT summary)
7	Bought inventory for cash: \$4000, plus GST \$400 (EFT rec. 305)

- a Enter the transactions into the general journal of Ambient Audio.
- b Prepare all general ledger accounts by posting all entries from your general journal.
- c Balance the accounts and prepare a trial balance as at 7 May 2028.

4 General journal to ledger accounts

The following transactions relate to the business of Betty's Boutique.

Jun 1	B Rubble deposited \$150 000 to commence the business. Purchased the business premises for \$720 000, paying \$120 000 cash with the balance being financed by a loan from NAB Finance.
3	Bought inventory for \$15 000 cash, plus GST of \$1500, and office equipment for \$4500 cash, plus GST of \$450
4	Purchased \$18 000 worth of inventory on credit from Classic Clothes and was charged GST of \$1800
5	Sold goods for cash: \$4200, plus GST of \$420 (cost price of goods sold \$1900)
6	Paid wages of \$450
7	Invoiced clients for credit sales \$5800 and charged them GST of \$580 (cost price \$2500)

- a Prepare general journal entries for the above transactions. (Narrations aren't required.)
- b Post your general journal entries to the general ledger accounts and balance the accounts to determine their balances as at 7 June 2028.
- c Prepare a trial balance as at 7 June 2028.



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5 Analysis of the general journal

Nick Smith operates a small business, Cake Craze, selling gourmet cupcakes and doughnuts. He has provided the following extract from his general journal for the month of June 2028.

GENERAL JOURNAL

Date	Details	Dr	Cr
2 Jun	Computer	2 000	
	Capital		2 000
4 Jun	Inventory	6 000	
	GST clearing	600	
	Cash at bank		6 600
6 Jun	Inventory	5 000	
	GST clearing	500	
	Accounts payable		5 500
8 Jun	Advertising	400	
	GST clearing	40	
	Cash at bank		440
10 Jun	Cash at bank	220	
	GST clearing		20
	Sales		200
	Cost of sales	100	
	Inventory		100
12 Jun	Inventory	5 400	
	GST clearing	540	
	Accounts payable		5 940
14 Jun	Cost of sales	1 500	
	Inventory		1 500
	Accounts receivable	3 300	
	Sales		3 000
	GST clearing		300
16 Jun	Cleaning of premises	100	
	GST clearing	10	
	Cash at bank		110

At 1 June 2028, the following account balances were noted:

- Cash at Bank: \$4300 debit
- Inventory: \$35 400 debit
- GST Clearing: \$3200 credit.

- Describe the transactions that have resulted in each of the journal entries shown.
- Prepare the relevant entries in the following general ledger accounts and balance them at the end of June 2028: Cash at Bank, Inventory and GST Clearing.

6 Analysis of ledger accounts

The following accounts appeared in the general ledger of Armadale Auto Parts, a small business owned and operated by Karen Rivalland.

CASH AT BANK

		\$			\$
1 Jun	Capital	30 000	2 Jun	Fittings/GST clearing	16 500
4 Jun	Sales/GST clearing	660	3 Jun	Inventory/GST clearing	3 300

CAPITAL

		\$			\$
			1 Jun	Cash at bank	30 000

FITTINGS

		\$			\$
2 Jun	Cash at bank	15 000			

GST CLEARING

		\$			\$
2 Jun	Cash at bank	1 500	4 Jun	Cash at bank	60
3 Jun	Cash at bank	300	6 Jun	Accounts receivable	10
5 Jun	Accounts payable	40			

INVENTORY

		\$			\$
3 Jun	Cash at bank	3 000	4 Jun	Cost of sales	300
5 Jun	Accounts payable	400	6 Jun	Cost of sales	60

COST OF SALES

		\$			\$
4 Jun	Inventory	300			
6 Jun	Inventory	60			

SALES

		\$			\$
			4 Jun	Cash at bank	600
			6 Jun	Accounts receivable	100

ACCOUNTS PAYABLE

		\$			\$
			5 Jun	Inventory/GST clearing	440

ACCOUNTS RECEIVABLE

		\$			\$
6 Jun	Sales/GST clearing	110			

In chronological order, list the transactions that resulted in the double entries in the above ledger accounts.



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7 Detecting errors in a trial balance

The following errors were made in recording transactions in general ledger accounts:

- a** A debit to Wages of \$500 was recorded as a debit to Insurance of \$500.
- b** A \$600 credit to Repair Fees was recorded as a debit to Repair Fees.
- c** A debit of \$164 to Advertising was recorded as a debit of \$146 to Advertising.
- d** A receipt of \$50 interest was recorded as a debit to Interest and a credit to Cash at Bank.
- e** A cash purchase of inventory of \$300 wasn't recorded in the books at all.
- f** \$324 received from accounts receivable was debited to Cash at Bank as \$324 and credited to Accounts Receivable as \$342.
- g** A credit sale of goods for \$200 was recorded as a cash sale. The cost of sales of \$100 was recorded as a debit to Inventory and a credit to Cost of Sales.
- h** A cash sale of \$550, including GST of \$50, was recorded as a debit to Cash at Bank of \$550, a debit to GST Clearing of \$50 and a credit to Sales of \$500.

For each error listed, state what difference there would be in the totals of a trial balance. Explain your answers.



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8 From documents to trial balance

The following documents were found in the office of Vicky's Vacs, a small business that specialises in vacuum cleaners. The owner, Vicky Baron, still issues many handwritten receipts and makes all payments via EFT.

On 1 March 2028, the following account balances were available:

- Cash at Bank: \$2300
- Accounts Receivable – Domestic Cleaning: \$100
- Inventory: \$25 000
- Accounts Payable – Victorian Vacuum Cleaners: \$200
- GST Clearing: \$5000 (credit balance)
- Capital – Baron: \$22 200.

Vicky's Vacs		Receipt 101 TAX INVOICE	
Shop 1 Black Arcade, Melbourne VIC 3000 ABN 04 213 984 618			
Received from	<i>M. Kingsley</i>	Date	<i>2/3/28</i>
The amount of	<i>Four hundred & forty dollars</i>	\$	<i>440.00</i>
For	<i>Cash sale – Hoover model BG345</i>	GST included	\$ <i>40.00</i>
Signed	<i>V. Baron</i>	Received with thanks	

Vicky's Vacs		Receipt 102 TAX INVOICE	
Shop 1 Black Arcade, Melbourne VIC 3000 ABN 04 213 984 618			
Received from	<i>P. Lazzaro</i>	Date	<i>7/3/28</i>
The amount of	<i>Two hundred & twenty dollars</i>	\$	<i>220.00</i>
For	<i>Cash sale – Lark Standard</i>	GST included	\$ <i>20.00</i>
Signed	<i>V. Baron</i>	Received with thanks	





82 Queens Avenue
North Melbourne VIC 3051
ABN 09 004 121 982

Date 4/3/28
Terms 30 days

TAX INVOICE **A144**

To Vicky's Vacs
Shop 1 Black Arcade
Melbourne VIC 3000

Description	Qty	Unit price	Subtotal	GST	Total
Hoover WQ12 cleaners	10	\$150.00	\$1500.00	\$150.00	\$1650.00
Totals			\$1500.00	\$150.00	\$1650.00

Total (excluding GST) \$1500.00

Total GST payable \$150.00

Total amount payable (including GST) \$1650.00



Shop 1 Black Arcade, Melbourne VIC 3000
ABN 04 213 984 618

Receipt 103
TAX INVOICE

Received from A. Filardo

Date 7/3/28

The amount of Three hundred & thirty dollars \$ 330.00

For Cash sale — Lark Deluxe GST included \$ 30.00

Signed V. Baron

Received with thanks

EFT Receipt No. 423

AMOUNT \$165 (inc. GST)
FROM Vicki's Vacs
Account: 02-9398 4618
EAST BANK
TO Dynamic Advertising
Account: 07-204 161245
STATE BANK

12 March 2028 10.00 a.m.

EFT Receipt No. 424

AMOUNT \$200
FROM Vicki's Vacs
Account: 02-9398 4618
EAST BANK
TO B. Dylan (Wages)
Account: 99-1956 6768
NATIONAL BANK

13 March 2028 1.06 p.m.



Shop 1 Black Arcade, Melbourne VIC 3000
ABN 04 213 984 618

Receipt 104
TAX INVOICE

Received from J. Ha

Date 16/3/28

The amount of Three hundred & thirty dollars \$ 330.00

For Cash sale — Hoover model WQ12 GST included \$ 30.00

Signed V. Baron

Received with thanks







Shop 1 Black Arcade, Melbourne VIC 3000
ABN 04 213 984 618

Receipt 105
TAX INVOICE

Received from A. Erkihun

Date 19/3/28

The amount of Four hundred & forty dollars

\$ 440.00

For Cash sale — Lark Deluxe

GST included \$ 40.00

Signed V. Baron

Received with thanks



Shop 1 Black Arcade, Melbourne VIC 3000
ABN 04 213 984 618

TAX INVOICE 432
Date: 21/3/28

To: Hinton Hotel
999 Flinders Street
Horsham VIC 3400

Description	Quantity	Unit price	Subtotal	GST	Total
Hoover WQ12 cleaners	6	\$300.00	\$1 800.00	\$180.00	\$1 980.00
Totals			\$1 800.00	\$180.00	\$1 980.00

Total (excluding GST)

\$1 800.00

Total GST payable

\$180.00

Total amount payable (including GST)

\$1 980.00

Terms: 30 days

EFT Receipt No. 425

AMOUNT \$66 (inc. GST)

FROM Vicki's Vacs

Account: 02-9398 4618

EAST BANK

TO Wholesale Stationery

Account: 05-7271 3929

BALLARAT BANK

23 March 2028 10.36 a.m.

EFT Receipt No. 425

AMOUNT \$150

FROM Vicki's Vacs

Account: 02-9398 4618

EAST BANK

TO B. Dylan (Wages)

Account: 99-1956 6768

NATIONAL BANK

26 March 2028 1.30 p.m.

It is Vicky Baron's policy to double the cost price of all inventory items to determine selling prices. For example, an item that sells for \$300 has a cost price of \$150.

- Using the source documents provided, enter the transactions relating to Vicky's Vacs in the general journal.
- Enter the opening balances into the general ledger accounts and post the entries from the general journal prepared in part **a**.
- Prepare a trial balance as at 31 March 2028.

9 Balance sheet to balance sheet

Lovejoy's Lava Lamps has been operating as a small business for a number of years. On 1 July 2028, its assets and liabilities were as follows.

Assets	\$	Liabilities	\$
Cash at bank	4 000	Accounts payable	1 000
Accounts receivable	1 300	Loan from bank	12 000
Inventory	26 000	GST clearing	2 000
Shop fittings	25 000	Owner's equity	62 550
		Capital – Lovejoy	?

During July 2028, the following transactions occurred.

Jul 2	Purchased inventory on credit: \$1700, plus GST of \$170
3	Paid insurance: \$50, plus GST of \$5 (for one month)
4	Received from cash clients: \$880, including GST of \$80 (cost of sales \$350)
5	Paid monthly loan repayment: \$500
6	Received \$600 from N Flanders – accounts receivable
10	Paid \$100 for stationery, plus GST of \$10
11	Purchased new computer for \$1650 cash (including GST of \$150)
12	Lovejoy withdrew \$100 for personal use
13	Received \$1100 from cash sales, including GST of \$100 (cost price \$500)
14	Paid fortnight's wages: \$650
16	Paid accounts payable for inventory purchases from last month: \$600. Sold goods for cash for \$550, including GST of \$50 (cost price \$300). Cash sales of goods: \$1200, plus GST of \$120 (cost price \$450)
19	Paid advertising account: \$180, plus GST of \$18
20	Received \$660 from cash client, including GST of \$60 (cost of sale: \$300)
23	Sent out a quote for lamps for \$1980 to Lunar Homes (including GST). Invoiced N Flanders for \$550 for another credit sale, including GST (cost of sale: \$270)
28	Paid fortnight's wages: \$650
30	Banked cash sales of \$1880, plus GST of \$188 (cost of sales \$1030)

- Enter the transactions into the general journal for Lovejoy's Lava Lamps. (Narrations are not required.)
- Calculate Lovejoy's capital figure as at 1 July 2028 and enter the opening balances into ledger accounts.
- Enter the transactions into the general ledger of Lovejoy's Lava Lamps.
- Formally balance the ledger accounts and extract a trial balance as at 31 July 2028.
- Prepare an income statement for the month ended 31 July 2028.
- Prepare a classified balance sheet as at 31 July 2028.

10 Balance sheet to balance sheet

Deckard's Drones had the following account balances in its general ledger on 1 August 2028.

	\$		\$
Cash at bank	1 200	Accounts payable	2 750
Accounts receivable	300	Loan – Nissan Finance	15 000
Inventory	43 800	GST clearing	3 000
Vehicle	38 000	Capital – Deckard	62 550



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During August 2028, the following transactions occurred.

- Aug 2 Cash sales: \$3200, plus GST of \$320 (cost of sales: \$1500)
- 3 Purchased goods on credit from Oz Electricals: \$5400, plus GST
- 5 Paid advertising account with local newspaper: \$140, plus GST of \$14
- 8 Received from cash clients: \$2860, including GST of \$260 (cost of sales: \$1400).
The owner withdrew \$300 cash from the business
- 10 Invoiced J Walker \$385 for credit sales, including GST of \$35 (cost price: \$170)
- 11 Monthly insurance premium paid on vehicle: \$480, plus GST of \$48
- 12 J Beam paid \$300 on account
- 13 Purchased stationery for cash: \$70, plus GST
- 16 Paid Oz Electricals \$1500
- 17 Arranged with the bank an overdraft limit of \$10 000
- 18 Received from cash customers: \$2800, plus GST of \$280 (cost price: \$1500)
- 20 Inventory bought for cash: \$1800, plus GST of \$180
- 23 Cash clients paid a total of \$1980, including GST of \$180 (cost of sales: \$950)
- 24 Loan repayment made to Nissan Finance: \$250
- 26 J Walker paid \$100
- 29 D Deckard withdrew cash for personal use: \$400
- 30 Submitted a quote to supply two large drones to Altona College
(selling price: \$1200 + \$120 GST each, cost price: \$700 each)

- a** Enter the above transactions into the general journal for Deckard's Drones. Use one account for all accounts receivable and one account for all accounts payable.
- b** Enter the opening balances into the appropriate general ledger accounts and post the general journal entries to your accounts.
- c** Formally balance the ledger accounts and extract a trial balance as at 31 August 2028.
- d** Prepare an income statement for the month ended 31 August 2028.
- e** Prepare a classified balance sheet as at 31 August 2028.



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CASE STUDY

Smith's Great Outdoors is a small business that specialises in backpacks, tents and camping equipment. Jakob Smith has produced the following trial balance at the end of the firm's reporting period.

SMITH'S GREAT OUTDOORS: TRIAL BALANCE AS AT 31 MARCH 2028

	\$		\$
Advertising	1 440	Capital	139 860
Cash at bank	5 290	Cash sales	86 340
Commission revenue	1 540	Accounts payable	3 360
Cost of sales	62 000	Credit sales	35 400
Drawings	10 800	Accounts receivable	2 500
Insurance	2 300	GST clearing	4 000
Interest on loan	3 890	Loan from bank	21 000
Inventory	55 400		
Office equipment	9 800		
Postage	1 020		
Rent of premises	96 200		
Security expenses	1 320		
Shop fittings	12 400		
Telephone	2 840		
Wages	24 300		
	290 540		
Miscellaneous expenses	1 920		
	292 460		292 460



» Smith had some difficulty getting his trial balance to balance. His investigation into the accounts of the business revealed the following information:

- A credit sale of \$3740, with GST of \$374, was recorded as \$3470 and GST of \$347. The cost price of the sale was \$1700; this was recorded as a debit to Inventory and a credit to Cost of Sales.
 - A cash payment of \$640 (plus GST of \$64) for advertising was completely omitted from the ledger accounts of the business.
 - Smith paid \$540 insurance on his family home and made an EFT payment from the business bank account. As it was paid from the firm's bank account, this payment was included in the Insurance account shown in the trial balance.
 - A payment of a telephone bill of \$440 (including GST of \$40) was accidentally debited to the Wages account. (GST was recorded accurately.)
 - Smith withdrew \$500 cash from the business in March 2028. Unfortunately, this has been recorded as a withdrawal of inventory.
 - A receipt of \$200 from an account receivable was recorded as a cash payment to an account payable.
 - A cash sale of \$900 was recorded as a credit sale of \$900. The cost of this sale was recorded correctly, as was the GST.
 - Smith isn't certain that he has sorted all the accounts correctly in the trial balance. He has asked you to check this, as he thinks some accounts may be listed on the wrong side of the report.
 - Smith couldn't get the trial balance to balance, so he created the item 'Miscellaneous Expenses \$1920' to get his trial balance in balance. No such expense had been paid during the reporting period.
- a** Smith has breached some accounting assumptions and/or failed to ensure that his accounting information has the required qualitative characteristics. State and explain the qualities and/or assumptions that he has breached, giving details of the items affected by the breaches.
- b** Redraft the entire trial balance for Smith's business, considering the information provided. Your redrafted trial balance should be accurate as at 31 March 2028.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Double entry accounting means that at least two financial items are affected by every transaction. However, when cash sale of inventory is made, five different accounts are affected. **Explain** why this is the case.

Question 2 (5 marks)

The owner of Carew's Cookware has provided the following information in relation to their business. Selling prices in the business are determined by adding 100% mark-up to all cost prices.

May 1	Bought inventory for \$5000, plus GST. EFT receipt 312 was issued on 1 May for this transaction.
2	Sold inventory on credit for \$1200, plus GST (Invoice Y643).

Using the information provided, **prepare** the relevant general journal entries to record these transactions.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



General journal transactions

KEY TERMS

Opening journal entry
Fair value
Correcting entry

This chapter focuses on how to use the general journal to record common transactions other than sales and expenses, and to correct errors made in the recording process.

Learning objectives

By the end of this chapter, you will be able to:

- **use** the general journal to establish a set of double entry records [6.1]
- **record** the contribution of assets by a business owner [6.2]
- **record** the withdrawal of assets by a business owner [6.2]
- **record** inventory being used for advertising purposes [6.3]
- **record** settlement discounts for both accounts receivable and accounts payable [6.4]
- **correct** recording errors through the general journal [6.5]

PRIOR KNOWLEDGE

CHAPTER 4: Double entry recording: An introduction

CHAPTER 5: The general journal and the general ledger



Estimated time required: 1 week



6.1 Managing a double entry system



In previous chapters, you learnt about many of the day-to-day financial transactions business owners are required to record in a general journal and general ledger accounts, using the rules of double entry accounting. In this chapter, you will examine some additional transactions, still keeping those rules in mind.

For example, the following events may occur during the life of a business:

- the owner contributes assets (other than cash)
- the owner withdraws an asset (other than cash) for personal use
- the owner decides to introduce a double entry accounting system
- the owner returns inventory purchased to a supplier
- a customer returns inventory sold
- settlement discounts are provided by accounts payable and to accounts receivable
- errors are made in the recording process and corrected via the general journal.

Contributing multiple assets

Often, management uses a general journal for the first time when the business is created. This usually involves the business owner making a cash contribution, with a debit entry to the Cash at Bank account and a credit entry to Capital as the first double entry. However, if the owner contributes multiple assets, such as cash *and* equipment, an entry for each must be created in the general journal.

EXAMPLE 6.1

Linda Carter commences business on 1 March with a cash contribution of \$60 000, a vehicle valued at \$35 000 and equipment valued at \$5 000.

Three different assets are contributed by the owner, all of which are created through the general journal entry.

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Mar	Cash at bank	60 000	
	Vehicle	35 000	
	Equipment	5 000	
	Capital		100 000

A business owner may contribute assets other than cash.

The principles of double entry are upheld in this general journal entry because the total debits equal the total credits. The journal entry results in the following general ledger accounts.

CASH AT BANK					
		\$			\$
1 Mar	Capital	60 000			





VEHICLE

		\$			\$
1 Mar	Capital	35 000			

EQUIPMENT

		\$			\$
1 Mar	Capital	5 000			

CAPITAL

		\$			\$
			1 Mar	Cash at bank	60 000
				Vehicle	35 000
				Equipment	5 000

These entries are used to establish an accurate snapshot of the business when it is first established. The Cash at Bank account and the non-cash assets are created via the general journal entry. The three assets contributed by the owner are then accumulated in the Capital account, which shows that the owner has commenced trading with \$100 000 in starting capital.

Contributing a liability

In addition to the assets an owner invests in a business when setting it up, they may bring some established debts.

EXAMPLE 6.2

Linda Carter's vehicle was financed by a loan of \$18 000, which will become the responsibility of the business entity. This means the owner won't have a net worth of \$100 000. When the liability is taken into account, her net worth becomes \$82 000 (\$100 000 – \$18 000). The opening general journal entry then changes as follows.

GENERAL JOURNAL

Date	Details	Dr	Cr
1 Mar	Cash at bank	60 000	
	Vehicle	35 000	
	Equipment	5 000	
	Loan – NAB		18 000
	Capital		82 000

The accounting equation $OE = A - L$ can be used to determine the starting capital of the owner.

If a liability is contributed to a business along with a number of assets, this has a negative effect on the owner's Capital account, as it reduces the net worth of the business to the owner.

EXAMPLE 6.3

Linda Carter's updated Capital account would appear as follows once the loan is also taken into account.

CAPITAL					
		\$			\$
1 Mar	Loan – NAB	18 000	1 Mar	Cash at bank	60 000
				Vehicle	35 000
				Equipment	5 000

Establishing a new double entry system

Another possible scenario is where a business that has been operating for a number of years using single entry accounting decides to establish a set of double entry books. In this situation, the values for all accounts (as shown in the balance sheet) can be used as the data to be entered in the general journal.

EXAMPLE 6.4

Siliato's Sports has used a single entry accounting system up to now, with the following details.

Assets	\$	\$	Liabilities	\$	\$
Cash at bank		4 000	GST clearing	1 000	
Accounts receivable		3 000	Accounts payable	2 000	
Inventory		18 000	Loan – OK Finance	5 000	8 000
Shop fittings	24 000		Owner's equity		
Less: Accumulated depreciation	(7 000)	17 000	Capital		34 000
		42 000			42 000

The proprietor, Adrian Siliato, decides to introduce a full double entry system on 1 July 2028, using this information as the starting point. A general journal entry is created to set up the business.

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Jul	Cash at bank	4 000	
	Accounts receivable	3 000	
	Inventory	18 000	
	Shop fittings	24 000	
	Accumulated depreciation – shop fittings		7 000
	GST clearing		1 000
	Accounts payable		2 000
	Loan – OK Finance		5 000
	Capital		34 000

If a business already has accumulated depreciation, it should be treated as a negative asset and is therefore entered as a credit entry.

opening journal entry
a general journal entry made on the first day of business, or on the first day of a double entry recording system being established

Note that when setting up double entry for an existing business, the profit and/or drawings for the previous reporting period aren't required in the **opening journal entry**.

The general journal entry in Example 6.4 uses the accounting equation to determine the owner's capital figure. The account for accumulated depreciation is shown as a credit entry along with the liabilities of the business, as they both reduce the owner's equity in the business.

Once this entry is posted to the general ledger, the double entry system is officially started. All the usual entries can now be made in the journal on a daily basis.



6.2 Contribution or withdrawal of assets

The most common asset contributed to or withdrawn from a business by a proprietor is cash. However, there may be times when an owner contributes or withdraws a different asset. Consider the events entered into the journal below.

Jul	1	The owner contributed an office desk to the business, with a fair value of \$200.
	2	The owner withdrew inventory with a value of \$100 for personal use.

These transactions are recorded in the general journal as shown in Figure 6.1.

Figure 6.1 General journal entries for contribution or withdrawal of assets other than cash

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Jul	Office furniture	200	
	Capital		200
	Owner contributed an office desk to the business (Memo 12)		
2 Jul	Drawings	100	
	Inventory		100
	Owner withdrew inventory for personal use (Memo 13)		

Whenever an owner puts an asset into a business, the particular asset account must be debited and the Capital account credited. If an asset is withdrawn, the opposite occurs – the Drawings account is debited (to record the negative effect on owner's equity) and the particular asset account is credited.

Withdrawing inventory is more complicated. When a business buys its inventory, it records a debit entry to the Inventory account. If the owner withdraws some of this inventory, the asset account must be reduced to reflect that the amount of inventory on hand has decreased.

Always remember that the Inventory account should show the cost of goods available for sale at any time during the reporting period. If a decrease in inventory occurs because of a withdrawal by the owner, this transaction must result in a credit entry to the Inventory account.

Using fair value for assets

In Figure 6.1, the owner contributed an office desk to the business valued at \$200. If the business actually purchased the office desk from someone else, the verifiable cost of the asset would be used, as this would be supported by a source document (e.g. an EFT document).



As the business isn't actually buying the asset, a fair value needs to be estimated for second-hand assets.

In this case, the business didn't buy the asset. The owner originally purchased the desk from their personal resources and has now contributed it to the business entity. This means there is no source document to verify the cost of the asset to the business. The owner may have a document that proves the cost of the asset when it was first purchased, but the item may now be several years old, so its original cost has no relevance to the business.

When a business owner contributes a second-hand asset to their business, they make an estimate of its value for recording in the balance sheet. This is known as the **fair value** of an asset, which is based on a reasonable estimate of its current market value. A business owner usually makes this estimate based on advice from their accountant or an expert in the appropriate field.

The estimate won't satisfy the demand of *verifiability*, because there is no source document available to verify the actual current value of the asset. However, to satisfy the demands of *relevance* and *faithful representation*, a reasonable estimate may be used as an asset's fair value, so that meaningful information can be reported in the balance sheet.

fair value an estimate of an asset's value, used when a second-hand asset is contributed to a business

EXAM-STYLE QUESTION

A business owner has decided to contribute her personal vehicle to her business. She purchased the car three years ago for \$40 000 but its estimated current value is only \$28 000. Her accountant has recommended that the vehicle should be entered in the books at \$28 000.

Do you agree with the accountant's recommendation? **Explain** your answer fully, with reference to a qualitative characteristic of accounting. (3 marks)

Sample answer

As it wasn't the business that paid \$40 000 for the vehicle, this value shouldn't be used. Instead, a fair value should be used and this should be a reliable estimate based on information from the vehicle industry. Although such a value cannot be verified, the qualitative characteristic of relevance would support its use. Therefore, the advice of the accountant should be followed.

Exam advice

When asked for a qualitative characteristic (QC) (or an accounting assumption), always make it very clear which QC you are using in your response. Many students forget to state the QC in their answer. In the above response, 1 mark would be allocated for the correct QC, and 1 mark for stating that fair value should be used (and not the \$40 000 cost). The final mark would then be awarded for your explanation of *why* fair value should be used.

Don't name more than one QC whenever you tackle this type of question. Faithful representation, verifiability and relevance are very popular answers but never list all three, even if you think they are all correct! Make your selection based on the strongest possible answer and provide a logical explanation for that ONE answer.



6.3 Donations of inventory and business advertising

A business may give away some of its inventory for advertising or promotional purposes. For example, it may donate goods from inventory to local schools or sporting groups to assist with fundraising or as part of a sponsorship deal.

Although donations are often a gesture of goodwill towards the local community, they also represent advertising for the business. Whether a sign is erected in the rooms of a cricket club or the business is mentioned in a school's newsletter, there is usually a two-way relationship between the business and the group benefiting from the donated goods. The problem is how to record such an event in the books of the business.

Assuming that the business receives a material benefit from advertising in the local community, it is logical to create an Advertising account. However, no form of advertising has actually been paid for, so it doesn't involve a cash flow. The business has simply given away inventory to someone else, and the inventory levels of the business have decreased.

The general journal shown in Figure 6.2 creates an Advertising expense account of \$100 and decreases the Inventory account with the cost price of the goods given to the local school. This ensures that the Inventory account is accurate and that the goods sacrificed by the business are treated as expenses.

Figure 6.2 General journal entry for advertising via donation of inventory

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 May	Advertising	100	
	Inventory		100

This is the correct accounting treatment because the business has suffered a loss of economic resources, which leads to a decrease in the owner's equity.



6.4 Recording settlement discounts

When goods are bought or sold on credit, the credit terms of the transaction are usually stated on the invoice issued by the supplier of the goods. Therefore, credit terms are stated to accounts receivable when a credit sale is made. Accounts payable will also stipulate credit terms when credit purchases are made. Credit terms are often 30 days, but may also be 7 days, 14 days or 60 days. The credit terms may simply be: *Credit terms – strictly 30 days*. However, the invoice may include credit terms with notations such as 2/7: n/30. This indicates that a 2% discount is available if the account is settled within 7 days. If the customer doesn't take advantage of the discount available, the net amount is due within 30 days. There are a number of reasons why a business may offer credit customers a settlement discount as an incentive to pay.

- If accounts receivable pay early, the likelihood of bad debts is decreased.
- Early receipt of cash allows a business to pay for its inventory purchases from accounts payable.
- Early receipt of cash improves the liquidity of the business.
- Cash received earlier may be used to reduce the business's other debts.

Discount expense and accounts receivable

When recording a receipt of cash from accounts receivable, it is important to check if a discount has been granted.

Consider the following example.

- 1 June: Heppell Sports sold goods on credit to Moe Football Club for \$500, plus \$50 GST on credit terms of 2/14, n/30.
- 10 June: Moe Football Club settled the account in full.

As the football club settled its account within 14 days of the invoice, it would be entitled to 2% of the total amount owing. Therefore, 2% of \$550 = \$11 discount. This amount should be recognised as an expense and is referred to as a discount expense. This means that only \$539 would be received from the customer (\$550 – \$11 = \$539).

The general journal entry would therefore be as shown.

GENERAL JOURNAL			
Date	Details	Dr	Cr
10 Jun	Cash at bank	539	
	Discount expense	11	
	Accounts receivable – Moe Football Club		550

The discount granted to an accounts receivable can be recorded in the general ledger as one combined entry – Bank/Discount expense – or as two separate entries. The two approaches are demonstrated below and include the entries for the credit sale and the receipt of cash with a discount granted.

Method 1

GENERAL LEDGER

ACCOUNTS RECEIVABLE – MOE FC					
Date	Cross-reference	\$	Date	Cross-reference	\$
1 Jun	Sales/GST clearing	550	10 Jun	Bank/Discount expense	550

Method 2

GENERAL LEDGER

ACCOUNTS RECEIVABLE – MOE FC					
Date	Cross-reference	\$	Date	Cross-reference	\$
1 Jun	Sales/GST clearing	550	10 Jun	Bank	539
				Discount expense	11
		550			550

The entry to the Discount Expense account would appear as follows.

DISCOUNT EXPENSE					
Date	Cross-reference	\$	Date	Cross-reference	\$
10 Jun	Accounts receivable – Moe FC	11			

Discount revenue and accounts payable

Just as accounts receivable may be granted a discount for the quick settlement of their accounts, a business may receive discounts from its suppliers. When a discount is granted by accounts payable, it should be recorded as *discount revenue*. For example, a business owes \$400 to one of its suppliers (Acme Co.) but has been granted a \$15 discount for prompt settlement, which was made on 12 July. The following general journal entry would be the result.

GENERAL JOURNAL			
Date	Details	Dr	Cr
12 Jul	Accounts payable – Acme Co.	400	
	Cash at bank		385
	Discount revenue		15

When this entry is posted to the general ledger accounts, it too can be recorded in one of two ways. The two approaches are demonstrated below.

Method 1

GENERAL LEDGER

ACCOUNTS PAYABLE – ACME CO.					
Date	Cross-reference	\$	Date	Cross-reference	\$
12 Jul	Bank/Discount revenue	400	1 Jul	Inventory/GST clearing	400

Method 2

GENERAL LEDGER

ACCOUNTS PAYABLE – ACME CO.					
Date	Cross-reference	\$	Date	Cross-reference	\$
12 Jul	Bank	385	10 Jun	Inventory/GST clearing	400
	Discount revenue	15			
		400			400

The entry to the Discount Revenue account would appear as follows.

DISCOUNT REVENUE					
Date	Cross-reference	\$	Date	Cross-reference	\$
				Accounts payable – Acme Co.	15

EXAM-STYLE QUESTION

Ed Heath, the owner of EH Auto Spares, sold goods on credit on 1 May 2028 to Spotswood Garage for \$3300, including GST. The credit terms were 3/30, n/60 and the account was settled in full on 22 May 2028 via an electronic transfer.

Prepare the general journal entry for 22 May in the books of EH Auto Spares. A narration is required. (3 marks)

Sample answer

GENERAL JOURNAL

Date	Details	Dr	Cr
May 22	Cash at bank	3 201	
	Discount expense	99	
	Accounts receivable – Spotswood Garage		3 300
	Cash received on account after allowing a discount of 3% for prompt payment (EFT)		

Exam advice

With only 3 marks available in this question, 1 mark would usually be allocated for a satisfactory narration (which must include the reference to a source document). Only 2 marks remain, but there are three different ledger accounts affected by the transaction. A common practice is to allocate 1 mark for two entries. In this case, the Bank and the Discount entries would be allocated 1 mark for the two correct entries. This is because if you make a calculation error with the discount, the Bank entry would be adjusted consequentially. Therefore, 1 mark for the two debits, 1 mark for the credit to Accounts Receivable and 1 mark for the narration.

Don't rush your responses to what appears to be an easy 3 marks. Students often make common errors with these recording-type questions. Some will use Accounts Payable, rather than Accounts Receivable; others will miscalculate the discount being provided. And if you don't include a narration, you will sacrifice 1 mark straight away.

6.5 Correcting errors through the general journal



Another use of the general journal is to correct errors made in the recording process, by means of **correcting entries**.

When accounts are balanced and a trial balance is prepared, errors may be detected that need to be corrected. If the accounts contain incorrect debits or credits, they shouldn't just be erased, written over or otherwise changed. This is unacceptable accounting practice, as it makes it difficult to detect fraud. Instead, if an error is detected it must be corrected by making a correcting entry in the journal.

When correcting an error through the general journal, you must do two things:

- 1 Remove the error(s) in the books. This may mean making a credit entry to counteract an incorrect debit (or vice versa).
- 2 Introduce the missing correct entry. This can be done by adding correcting entries.

correcting entry a general journal entry made in order to correct an error

EXAMPLE 6.5

The following errors are found in the records of Lloyd's Locks:

- 1 A payment of \$80 for advertising was incorrectly debited to Insurance.
- 2 An invoice for \$40, plus GST of \$4, was charged to B Andrews but should have been charged to P Andrews.
- 3 A payment of \$123 for petrol was recorded in the cash payments journal as \$132.

A series of correcting entries are made in the general journal.

GENERAL JOURNAL			
Date	Details	Dr	Cr
30 Nov	Advertising	80	
	Insurance		80
	Correction of error – advertising debited to Insurance (Memo 11)		
30 Nov	Accounts receivable – P Andrews	44	
	Accounts receivable – B Andrews		44
	Correction of error – incorrect Accounts Receivable account charged (Memo 12)		
30 Nov	Cash at bank	9	
	Petrol expense		9
	Correction of error – payment of \$123 recorded as \$132 (Memo 13)		

In the first two entries in Example 6.5, the credit entry is used to eliminate an error:

- Insurance has been credited because of an incorrect debit. The debit entry should have been to the Advertising account.
- Accounts Receivable – B Andrews has been credited with \$44 to remove an error as the incorrect account was charged when a sale to P Andrews was made.

The first two entries introduce the debit entries that should have been made in the first place. When these two entries are posted, the record will accurately reflect events.

Note that, in the second entry, no adjustments are required to the Sales account, the Inventory account, the Cost of Sales account or the GST Clearing account. This is because the error involved the debit entry being made against the wrong accounts receivable. All of the other accounts have correct entries and don't require any corrections.

The third entry differs slightly. When an incorrect figure has been entered, there are two possible ways to correct the error.

- 1 If the journal has already been posted, this error will now be in the general ledger accounts. In this situation, a journal entry is necessary to correct the mistake – the \$9 correcting entry.
- 2 If the journal hadn't already posted, then the double entry in the general journal will be correct, but the amount debited to the Petrol expense account is incorrect. In this situation, it's appropriate to rule a line through the incorrect figure and write the correct number above it. (In a spreadsheet, you might replace the incorrect figure, but leave a comment on the cell to note the original error.) As mentioned earlier, numbers aren't erased from the books; any corrections should be clearly visible, including the incorrect original amount.

A set of ledger accounts shouldn't contain many errors, but when they are found, a formal general journal entry is the best way to correct them. This leaves no doubt as to what has been corrected in the ledger accounts. It also fits with the systematic approach to accounting, because all entries in accounts can be traced back to their source via a journal entry.



Practise and apply

6



REVISION: SUMMARY OF KEY CONTENT

- [6.1]** When a business owner contributes multiple assets to create a business, they must record each asset in the general journal entry. Liabilities brought into the business at the start should also be recorded in the Owner's Capital account.
- [6.1]** When an existing business begins using double entry accounting, the values for all accounts (as shown in the balance sheet) are used as the data to be entered in the general journal. The profit and/or drawings for the previous reporting period aren't required in the opening entry.
- [6.2]** Whenever an owner puts an asset into a business, the asset must be debited and the Capital account credited. If an asset is withdrawn, the opposite occurs. If the owner withdraws inventory, the asset account must be reduced.
- [6.2]** If the owner adds their own assets to the business, this isn't a purchase and the business won't have a source document to verify the asset's cost. Instead, a fair value should be estimated and recorded.
- [6.3]** Businesses often donate inventory as a form of advertising. This should be reflected in the general ledger by decreasing the Inventory account, then recording the value of the inventory as an expense in an Advertising account.
- [6.4]** When accounts are settled by accounts receivable or with accounts payable, a discount may be granted if the payment was made within the credit terms stated on the original invoice. These settlement discounts should be recorded when the payment is received from accounts receivable or a payment is made to accounts payable.
- [6.5]** When errors are detected in accounts, it is unacceptable simply to change or erase them. Instead, correcting entries should be made in the journal to fix the balance and to make a note of the error.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Opening entry: Assets only

Laura Pase decides to open a business trading as Champion Sound. On 1 April 2028, she contributes cash of \$50 000, a vehicle with an agreed value of \$32 000 and PA equipment valued at \$12 000. These details are noted on Memo 101.

- Prepare the opening general journal entry for the business on 1 April 2028.
- State the accounting equation of the business as at 1 April 2028.



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2 Opening entry: Including liability

Kirsten Reitsema commenced her business on 1 March 2028, trading as Hampton Wholesalers. She contributed the following assets: cash \$68 000, vehicle \$36 000 and equipment \$23 000. Kirsten financed the vehicle with a loan from NAB for \$10 000, which is now the responsibility of the business. All details were recorded on Memo 201.

- Prepare the opening journal entries for Hampton Wholesalers.
- Prepare a balance sheet for the business as at 1 March 2028.
- Explain how Kirsten would have determined the value of \$36 000 for her vehicle.



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3 Single entry to double entry

Aaron Turner is the owner of Traralgon Gifts. He has used single entry accounting since he started the business. A friend suggests that he should convert to double entry accounting. Using the following information, prepare the opening general journal entry on 1 August 2028 to establish a set of books for Traralgon Gifts under double entry accounting.

ASSETS AND LIABILITIES AS AT 31 JULY 2028

	\$		\$
Cash on hand	200	GST clearing	500
Cash at bank	2 200	Accounts payable	3 600
Accounts receivable	3 200	Loan – AGC	7 500
Inventory	44 300	Loan – NAB	12 400
Display equipment	12 600		
Less: Accumulated depreciation	(2 600)		
Computer	3 200		



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4 Single entry to double entry

Leah Harris owns a business trading as Bulla Road Hairdressing Supplies. She has been operating for a number of years using a system of single entry accounting. Leah has decided that the business is now too complex for single entry and wants to set up a full set of double entry records. The balance sheet of the business as at 30 June 2028 is provided below.





BULLA ROAD HAIRDRESSING SUPPLIES: BALANCE SHEET AS AT 30 JUNE 2028

Assets	\$	\$	Liabilities	\$	\$	\$
Cash on hand		200	GST clearing		300	
Accounts receivable		660	Cash at bank		1 000	
Inventory		40 340	Loan – MT Finance		14 700	16 000
Shop fittings	20 000		Owner's equity			
Less: Accum. dep'n	6 000	14 000	Capital	45 000		
Office equipment	9 000		Net profit	4 700	49 700	
Less: Accum. dep'n	2 500	6 500	Less: Drawings		4 000	45 700
		61 700				61 700

Prepare the necessary general journal entry to establish a double entry system on 1 July 2028.

5 Contributions and withdrawals of assets

The owner of Third Dimension Print Supplies, Eddie Stefani, listed the following transactions during January 2028.

Jan 3	Eddie contributed a computer from his home to the business. The computer had a fair value of \$2300 (Memo 101).
24	Eddie needed to do some repairs at home on his own 3D printer. He took some inventory items from the shop, which had originally cost the business \$120. These items were going to be sold for \$250 (Memo 102).

Prepare the general journal entries to record each of these events.

6 Inventory used for advertising

Lydia Lawrence is the owner of Northside Music & Beats. She received a request from Northcote Primary School to donate some goods for its annual raffle. Lydia decides that it may be beneficial for her business, as the principal has guaranteed advertising space in the school newsletter.

On 31 March 2028, Lydia took some inventory from her shelves, which was selling for a total of \$1200, and noted the details on Memo 162. She also advised that she applies a mark-up of 100% on all goods sold.

- Prepare the general journal required as a result of the above information.
- State the twofold effect of your entry on the accounting equation of Northside Music & Beats.

7 Inventory used for advertising

Wodonga Kidsport is owned and managed by Bill Teggelove. A local Lions Club contacts a number of businesses, looking for donations of toys and sporting goods. Teggelove is keen to help out, as he sees it as a good way to build goodwill for his business with the local community. He decides to provide the following goods and notes their details on Memo 218 (issued 10 April 2028).

Quantity	Item	Cost price	Selling price
2	Bicycles	\$150.00	\$295.00
2	Tricycles	\$125.00	\$245.00
3	Cricket sets	\$45.00	\$99.00

- Prepare the general journal entry to account for the donated goods.
- A friend of Teggelove's suggests that any goods donated from his business should be recorded as drawings, because they are no longer available for sale. Do you agree with this statement? Explain your answer fully, with reference to the accounting assumptions and/or qualitative characteristics of accounting.



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8 Settlement discounts: Accounts receivable

- a Explain the meaning of each of the following credit terms: 5/7, 2/30; n/60.
- b A business received an EFT payment for \$290 on 31 March from accounts receivable C Anderson in full settlement of his account. The balance owing was \$298. Prepare the relevant general journal entry (Rec. 111).



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9 Settlement discounts: Accounts payable

An EFT payment of \$623 has just been made to accounts payable Di Carlo Imports, which is owed a total of \$650. Di Carlo Imports has agreed to grant a discount for prompt payment. Prepare the relevant general journal entry on 1 April 2028 (EFT 45).



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10 Settlement discounts: Accounts receivable

The following transactions took place during June 2028 between Brunswick Book Store and Debney Primary School. The credit terms offered to the school were 5/30; n/60.

Jun	1	Sold goods to Debney PS for \$600, plus GST (Invoice 43)
	8	Sold goods for \$880, including GST (Invoice 48)
	12	Debney PS settled the amount owing on Invoice 43
	18	Sold books to Debney PS for \$1000, plus \$100 GST (Invoice 55)
	22	Sold books on credit for \$1200, plus GST (Invoice 61)
	30	Debney PS paid the amount owing on Invoice 48

Prepare the general ledger accounts for accounts receivable Debney PS and Discount Expense for the month of June, including all relevant transactions.



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11 Settlement discounts: Accounts payable

Ace Computers purchases its computer inventory on credit from Quickie IT. The following transactions took place between the two entities during the month of March 2028. The credit terms offered to Ace Computers were 2.5/14; n/30.

Mar	2	Purchased goods for \$800, plus GST (Invoice 217)
	7	Bought inventory on credit for \$1320, including GST (Invoice 222)
	15	Settled the amount owing on Invoice 217
	21	Bought inventory from Quickie IT for \$1800, plus \$180 GST (Invoice 237)
	27	Purchased goods for \$1400, plus GST (Invoice 253)
	31	Settled the amount owing on Invoice 222

Prepare the general ledger accounts for accounts payable Quickie IT and Discount Revenue for the month of March, including all relevant transactions.

12 Correction of errors

At the end of November 2028, the following errors are found in the general ledger of Paint & Paper. Prepare general journal entries to correct these mistakes.

- a A payment of \$400 for wages was incorrectly debited to the Drawings account.
- b A receipt of \$100 from accounts receivable J Blake was recorded as being received from J Black.
- c A debit of \$540 to Insurance was entered in the journal as \$450.
- d Cash sales of \$200 were incorrectly credited to Commission Revenue.
- e A payment of \$150 for the hire of equipment was incorrectly debited to the Equipment account.

13 Correction of errors

Prepare the required general journal entries to ensure the following information is recorded correctly in the books of Fidget Factory on 30 November 2028.

- a An office desk purchased for cash to use in the business's office was accidentally debited to the Inventory account (Memo 41). The cost of the desk was \$600.
- b The owner contributed office furniture to the business from his personal assets. The furniture had a fair value of \$500 but it was recorded as \$50 (Memo 42).
- c J Barton paid the business \$480 on account. However, an entry was made against accounts receivable J Burton (Memo 43).
- d Inventory that cost the business \$100 was donated to the local school for a fete. This was incorrectly debited as drawings by the proprietor (Memo 44).
- e A payment of \$191 for advertising was incorrectly recorded in the general journal as insurance of \$119 (Memo 45).

14 Reviewing the general journal

The following information relates to a small business trading under the name of Peninsula Vintage Furniture. Prepare general journal entries (if necessary) for each of the items listed.

- a On 12 March 2028, the owner contributed a computer to the business from her home. The machine had a fair value of \$750 (Memo 81).
- b Registration and insurance were paid on the business's delivery van during the year. The total cost was \$820. On 14 June 2028, it was discovered that the full amount had been debited to the Delivery Van account (Memo 82).
- c On 7 July 2028, the owner found that a payment made in late June was incorrectly recorded in the journal. The payment was for courier fees totalling \$248. However, the journal entry shows a payment of \$284 (Memo 83).
- d On 19 July 2028, the owner donated some goods to the Salvation Army. The goods had originally cost \$500 and usually sell for \$950. The owner was unsure how to treat such an item and decided to treat it as a withdrawal for personal use (Memo 84).
- e The business completed an EFT for \$1280 to an accounts payable. Unfortunately, the payment was recorded in the journal as Advertising Expense.
- f A loan application was submitted to the bank in early August. The business requested an amount of \$25 000 to buy a second delivery van. On 8 August, the owner realised that she had made an error, as she had intended to ask for a loan of \$28 000.



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MODELLING EXERCISE

Matt La Spina is the owner of Dromana Wholesalers, a business that provides a range of soft drinks on credit to convenience stores and schools. The credit terms offered to all accounts receivable are 1/30, n/60. Matt is concerned about the fact that only 40% of customers take advantage of the discount on offer and quite a lot of time is spent on chasing up overdue accounts. The cost of debt collection fees is also a concern, as about \$2000 per month is currently spent on chasing up slow-paying customers. After discussions with most of his clients and through some additional market research, Matt makes the following estimates.

Monthly sales (all on credit): \$100 000.

	Credit terms	% of customers likely to take up discount	Debt collection fees per month
Option 1	1/30	40%	\$2 000
Option 2	2.5/30	50%	\$1 500
Option 3	5/30	60%	\$1 000
Option 4	7.5/30	70%	\$500

- Complete** an Excel spreadsheet to show the impact of the various options on Matt's business. **Determine** the total expenses created by each of the four options to show the effect on monthly net profit.
- Discuss** the pros and cons of each of the four options and recommend your preferred alternative for Matt to adopt. **Justify** your choice using data from your spreadsheet.



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EXAM-STYLE QUESTIONS

Question 1 (4 marks)

The owner of Carlton Sports Store, Connor Rutland, completed two memos recently.

11 May – Memo 201: Withdrew one soccer ball for his daughter's birthday.
Selling price \$60: mark-up 50%.

25 May – Memo 202: Donated four table tennis sets to Princes Park Primary School.

The principal of Princes Park has agreed to run a series of advertisements in the school newsletter in acknowledgement of the support of Rutland's business. Selling price per set \$30: mark-up 100%.

Prepare the general journal entries to record these events. (Narrations are not required.)

Question 2 (3 marks)

Erin Mephan owns a fashion boutique. She purchased \$4000 worth of inventory (plus GST) on credit on 20 May 2028. The invoice from Fairfield Fashions included the terms of 2.75/14, n/30. The supplier was paid on 28 May via EFT no. 427.

Prepare the relevant general journal to record the payment on 28 May.

Question 3 (3 marks)

Inventory withdrawn by the owner on 31 May 2028 was accidentally recorded as a cash sale. The item taken home originally cost the business \$250 and usually sells for \$490, plus GST. These details were noted on Memo 108.

Prepare the necessary general journal entry to correct this error on 31 May 2028. (Narrations are not required.)



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 7



The perpetual inventory system

KEY TERMS

Inventory
Physical stocktake
Inventory sheet
Perpetual inventory
Inventory account
Identified Cost method
First-In, First-Out (FIFO) method
Inventory card

This chapter focuses on the general journal, the general ledger and inventory cards used to record data.

Learning objectives

By the end of this chapter, you will be able to:

- **define** 'inventory' [7.1]
- **explain** what is involved in a physical stocktake [7.1]
- **describe** the perpetual inventory system [7.2]
- **outline** the role of the Inventory account [7.3]
- **describe** the double entry requirements of a trading business using perpetual inventory [7.3]
- **explain** the Identified Cost and First-In, First-Out (FIFO) methods of valuing inventory [7.4]
- **record** movements of inventory on inventory cards, using the First-In, First-Out (FIFO) method [7.5]
- **prepare** appropriate entries in ledger accounts for the purchase and sale of inventory [7.5]
- **identify** appropriate internal control procedures for managing inventory [7.5]
- **calculate, record and report** inventory losses and gains [7.6]
- **record** inventory card entries for inventory donated for advertising purposes [7.7]

PRIOR KNOWLEDGE

CHAPTER 1 Accounting essentials

CHAPTER 2 Balance sheets

CHAPTER 4 Double entry recording: An introduction



Estimated time required: 2 weeks





7.1 What is inventory?

inventory goods purchased by a trading business for the purpose of selling them at a higher price

A trading business buys **inventory** and sells it at a higher price to earn its revenue. If it sells enough inventory during the reporting period, its revenue should exceed its expenses, resulting in a profit. The definition of trading inventory excludes some items that a business may sell occasionally. For example, the business may sell equipment, vehicles and other non-current assets for a gain or a loss once the items are no longer useful. However, when management buys such assets, the intention is to use them within the business over several reporting periods, not to resell them to earn revenue.

Effective inventory management is crucial for a trading business, as it directly impacts customer satisfaction, cash flow and profitability. To succeed, the business must maintain enough inventory to meet its customers' demands and have accurate record-keeping systems and efficient inventory control practices.

The physical stocktake

physical stocktake the process of counting units of inventory on hand at a particular point in time

At the end of each of its reporting periods, a business should carry out a **physical stocktake** of its inventory. A stocktake determines the actual amount of inventory on hand at a given date. The value of the inventory at that time is then included in the business's balance sheet as a current asset. A stocktake has two stages.

- 1 The number of units of each type of inventory on hand at the end of a period is physically counted and recorded on **inventory sheets**.
- 2 The number of units is multiplied by the cost price per unit to calculate the total cost of inventory on hand as at that date.

inventory sheet a record used to note details of goods on hand when doing a physical stocktake

Figure 7.1 A typical inventory sheet

Inventory item	Quantity	Cost \$	Total cost \$
AB cricket bats	50	200	10 000
CV cricket balls	400	40	16 000
Mitre soccer balls	80	30	2 400
Kooka hockey sticks	60	30	1 800
Total inventory on hand			30 200

The number of units of each product on hand is physically counted and entered on inventory sheets.

When all the inventory has been counted, the quantity of each item is multiplied by its cost price to determine the total cost of inventory on hand.

Note that the quantity on hand of each inventory unit is stated, as well as its actual cost. In this example, the business's inventory on hand would be stated as \$30 200.

Businesses must ensure they have enough inventory to meet customer demand.



7.2 What is perpetual inventory?



Perpetual inventory (also known as continuous inventory) involves keeping records of all inventory movements throughout the reporting period. In other words, the perpetual method updates the balance of inventory on hand *every time* inventory moves in or out of the business. For example, when inventory is purchased, the balance increases; when sales are made, or when the owner withdraws inventory, the balance of inventory on hand decreases. The physical stocktake is then used to check the inventory records kept under this perpetual method of recording inventory movements.

perpetual inventory a system of inventory record keeping in which movements of inventory items are recorded on a continuous basis throughout a reporting period

A lot of recording is required under the perpetual inventory system. Inventory is usually recorded at cost price, so information about the cost prices of inventory is needed throughout the reporting period.

Advantages of perpetual inventory

- 1 **Greater control over inventory is possible, because up-to-date information is available throughout the reporting period, not just at the end.** Computerised inventory systems mean that information can be updated whenever transactions occur. This information is timely and highly valuable to the business.
- 2 **Slow-moving and fast-moving lines of inventory can be identified.** An inventory card is used to record all movements of an inventory item. Cards are updated throughout the reporting period so that current information is available about how often sales occur for each item. Based on this information, management can decide to increase the business's stock of items that sell well or to reduce or eliminate slow-moving items. For example, an inventory card with only a few entries (or none at all) would indicate a slow-moving inventory item and management may then decide not to sell that item in future.
- 3 **Reordering of inventory is more efficient.** Perpetual inventory involves keeping a record of how many units of each item are on hand at any time. When the number of units reaches a certain level, an order can be sent to the relevant supplier. This avoids the problem of running out of inventory and possibly missing out on sales.
- 4 **Interim profit reports can be prepared without doing a stocktake.** This is one of the big advantages of perpetual inventory. As records are updated continuously, in terms of both selling prices and cost prices of goods sold, a gross profit figure can be calculated daily. This is extremely valuable information for the business. If it can estimate its operating expenses, it can also estimate its net profit figure for each week or month of the reporting period. (It can only be an *estimate* of profit, though, as the physical stocktake may reveal other information such as inventory losses or gains.)
- 5 **The level of inventory losses or gains can be measured.** The perpetual inventory method together with the physical stocktake can identify the goods lost during the period due to theft (e.g. shoplifting) or breakages. The business can then react to such losses and make appropriate decisions, such as to install a security system. It can also identify inventory gains, such as when goods are oversupplied when purchasing inventory or are undersupplied to a customer.

In summary, the perpetual inventory system offers trading businesses increased control and efficiency in managing their inventory. It helps to optimise inventory levels, improve financial reporting accuracy and provide better customer service.

Disadvantages of perpetual inventory

- 1 **Additional record keeping.** Inventory balances must be updated on a continuous basis. This may increase the workload of the owner/manager, or it may require more staff.
- 2 **Additional costs may be incurred.** Management may have to purchase equipment such as computerised perpetual inventory systems and software, and hire extra staff (or train existing staff) in how to use it effectively.
- 3 **Periodic physical stocktakes are still required.** Even continuously updated inventory records can be inaccurate due to breakages, theft and errors. The only way to be sure of the actual inventory on hand is to count it by doing a periodic stocktake.

Despite these disadvantages, the benefits of the perpetual inventory system for a trading business usually far outweigh the costs.

EXAM-STYLE QUESTION

A small business owner was told by a friend: 'You're wasting your time doing a physical stocktake. If you use the perpetual inventory system, your records are updated daily so all the information you need is in your inventory cards.'

Do you agree with the friend's statement? **Explain** your answer fully. (2 marks)

Sample answer

*The friend is incorrect. A physical stocktake should always be done at the end of a reporting period, for two reasons. First, the details of the stocktake can be compared with the inventory cards, which will help identify if there have been any inventory losses or gains during the period. Second, the only way to determine the exact inventory on hand is to physically count it. The Inventory account shows how much inventory should be on hand, but the stocktake will reveal the **actual** inventory on hand. It is the value of the actual inventory that is reported in the balance sheet.*

Exam advice

An *Explain*-type question worth 2 marks requires a response with two distinct points. The first point above relates to identifying an inventory loss or gain, which requires a physical count. (This point refers to the effect on the *income statement*.) The second point refers to adjusting the total cost of inventory to be reported in the *balance sheet*.

Don't write one point and then try to reword it to make it look like a second point. The number of points in your response should match the number of marks.

7.3 The Inventory account



Inventory account a general ledger account used to record transactions affecting inventory

The **Inventory account** is used to record all movements of inventory. As you have seen in Chapter 4 (page 69), purchases of inventory are debited to an asset account, the Inventory account. During the reporting period, as sales are made, the cost price of these sales is transferred from the Inventory account to a Cost of Sales account (an expense).

Inventory is an asset, so whenever it increases, the Inventory account must be debited. If the level of inventory decreases, the Inventory account must be credited (see Table 7.1). The balance of the Inventory account represents the total cost of inventory on hand at a particular time.

Table 7.1 Summary of the Inventory account

INVENTORY	
Increases in inventory are caused by:	Decreases in inventory are caused by:
• buying goods • inventory gains • capital contributions of inventory*	• selling goods • inventory losses • drawings of inventory • inventory used for advertising

*Items for sale contributed to the business by the owner (e.g. an antique store owner may provide items for sale from their personal collection).

The Inventory account is a summary of total inventory and is backed up by records of individual inventory items in subsidiary records known as inventory cards. The total of all inventory cards must equal the balance of the Inventory account in the general ledger.



Changes to the level of inventory are recorded in the Inventory account.

Double entry under the perpetual method

This is a good time to revisit the basic double entries relating to inventory movements, to help you have a full understanding of all recording for inventory. Table 7.2 summarises the double entries required for buying and selling inventory for cash or credit.

Table 7.2 Double entry under perpetual inventory

Transaction	Source document	Double entry
1 Bought goods for cash	EFT receipt	Inventory Dr GST clearing Dr Cash at bank Cr
2 Bought goods on credit	Purchase invoice (original)	Inventory Dr GST clearing Dr Accounts payable Cr
3 Sold goods for cash	Receipt (copy) or EFT receipt (merchant copy)	Cash at bank Dr Sales Cr GST clearing (with selling price) Cr and Cost of sales Dr Inventory (with cost price) Cr
4 Sold goods on credit	Sales invoice (copy)	Accounts receivable Dr Sales Cr GST clearing (with selling price) Cr and Cost of sales Dr Inventory (with cost price) Cr

The table shows a variety of transactions that could appear in an Inventory account in the general ledger. Figure 7.2 shows the recording of these transactions in the Inventory account.

Figure 7.2 Inventory account in the general ledger

Purchases are recorded on the debit side of the ledger.

Sales are recorded on the credit side.

↓

INVENTORY

↓

	Date	Cross-reference	\$	Date	Cross-reference	\$	
1	1 Apr	Balance	25 000		Cost of sales	6 000	4
2		Cash at bank	10 000		Cost of sales	14 000	5
3		Accounts payable	20 000		Balance	35 000	6
			55 000			55 000	
7		Balance	35 000				

- 1 The balance on the debit side indicates that the business had inventory on hand costing \$25 000 at the start of the period.
- 2 Cash at bank: indicates that inventory was purchased using cash for \$10 000.
- 3 Accounts payable: inventory was purchased on credit for \$20 000.
- 4&5 Cost of sales: these entries record the cost price of goods sold during the period. Note that the Inventory account doesn't indicate whether these sales were made for cash or on credit. *All* sales will result in a cost of sales entry on the credit side of the Inventory account.
- 6&7 The balance of inventory on hand can then be determined, and this value is carried down to the debit side of the account, ready for the next period.

EXAM-STYLE QUESTION

Alannah Raunik, the owner of Alannah's Boutique, was emailed the following document.


15 Pascoe Vale Road
Ascot Vale

CHARGE TO Alannah's Boutique

TAX INVOICE 324
DATE 1 April 2028

QUANTITY	ITEMS	UNIT PRICE	TOTAL
10	Silk Scarves	\$15.00	\$150.00
GST 10%			\$15.00
TOTAL			\$165.00

CREDIT TERMS Strictly 30 days

Prepare the general journal entry required to record the above document in the books of Alannah's Boutique.

(3 marks)

Sample answer

GENERAL JOURNAL

Date	Details	Dr	Cr
1 Apr	Inventory	150	
	GST clearing	15	
	Accounts payable – United Distributors		165
	Purchased goods on credit (Invoice 324)		

Exam advice

Quite often, this type of question will be allocated 3 marks, but *don't* assume there is 1 mark for each entry. In this case, there may be 1 mark allocated for recording Inventory \$150 and GST clearing \$15. A second mark would then be allocated for the credit entry of \$165.

The third mark would be for the narration. The narration has to describe the transaction and it *must* include the details of the appropriate source document (in this case, Invoice 324). Although we usually record the debit entries first, the order of your entries doesn't matter. Just make sure that the numbers are in the correct column, as they indicate whether it's a debit entry or a credit entry.

Don't abbreviate account titles in general journal entries. Always use the full title – here: 'GST clearing'. ('GST' or 'GST cl.' aren't correct titles and using such abbreviations will usually cost you marks.) Also, if you are provided with the name of the supplier, always state the full title – here: 'Accounts payable – United Distributors'.



7.4 Identifying the cost price of sales

Table 7.2 included the source documents for the entries in the general journal and general ledger. These documents contain details such as the cost of purchasing inventory (purchase invoices or EFT) and the prices charged to customers for inventory sold (sales invoices, cash receipts or EFT).

Not included on the source documents is the cost price of the sales made by the business. These prices must be entered in the general journal on a continuous basis throughout the period and must therefore be readily available. So, how are cost prices recorded for accounting purposes? In VCE Accounting, there are two methods used by a trading business to assign cost prices to individual inventory items:

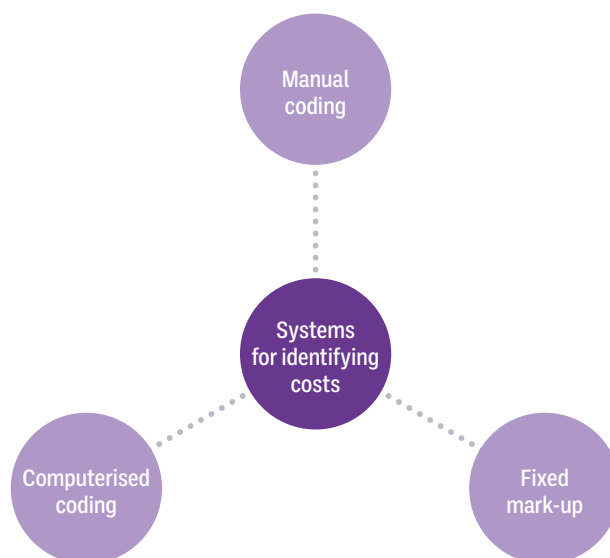
- 1 **Identified Cost:** the business owner identifies the actual cost of each item of inventory when it's sold.
- 2 **First-In, First-Out (FIFO):** the business owner makes an assumption that the first inventory purchased is the first inventory sold.

Identified Cost method

If a business uses the **Identified Cost method**, it must decide how to easily identify cost prices during a reporting period. The general journal needs to be written up daily, and the cost prices of all sales are required for both cash and credit sales. Figure 7.3 summarises the common methods of identifying cost prices.

Identified Cost method
a system of recording the actual cost of each individual unit of inventory

Figure 7.3 Common methods of identifying cost prices



Manual coding systems

One simple way to identify the cost of inventory is through a manual coding system. Such systems are cheap to implement and are effective if the volume of sales isn't too high. A business that sells large items, such as lounge suites or televisions, could use a manual coding system. In this case, the code involves a series of letters or numbers on the price tag of each item, such as the price tag shown in Figure 7.4.



Figure 7.4 Price tag with numeric code

The customer can see the selling price of \$65 for the item, but the numbers in the middle of the price tag are meaningless to them. They are a simple code for the following information:

- The first four digits (1804, in this example) indicate the date of purchase by the store (18 April).
- The next four digits (3250) indicate that the cost price of the item was \$32.50.
- The last digits (12) are a code for the supplier of the goods (i.e. the wholesaler).

This type of simple coding system can be varied to suit the needs of the individual business.

Figure 7.5 shows another type of coding system, which 'hides' the cost price of an inventory item by using an alphabetic code. Again, when a customer sees this item on display, the selling price is clearly marked but the letters above it are meaningless to them.



Figure 7.5 Price tag with alphabetic code

The cost price of the item has been included on the price tag by using the following code:

C	H	R	O	M	E	T	A	P	S
1	2	3	4	5	6	7	8	9	0

Each letter stands for a particular number. The letter C indicates 1, the letter M indicates 5, and so on. The slash in CM/TS separates dollars from cents. The cost price of this item is therefore \$15.70.

Once a staff member has used such a code for a short while, they can identify the cost price of any inventory item at a glance. The letters used in the code don't really matter as long as there are 10 different letters, but the cost price can be deciphered more quickly if the code is easy to remember (e.g. *chrome taps*).

If a staff member can easily identify the cost price of an item, they can quickly calculate the profit margin. This is useful when a customer asks for a discount. The seller can check the cost price on the spot and know the lowest price they can offer before the business loses money on the deal.

Fixed mark-up systems

Some small business owners prefer to keep things very simple and apply a set mark-up to *all* their products. For example, it's easy to determine selling prices by applying a 100% mark-up to all inventory (i.e. by doubling all cost prices). If a mark-up of 100% is applied, it's simple to work backwards from the selling price to the cost price – just halve the selling price.

However, not all small businesses apply one mark-up to all items of inventory, or one as simple as the 100% example. The formula below is useful.

$$\text{Cost price} = \frac{\text{Selling price} \times 100}{100 + \text{Mark-up}}$$

For example, inventory with a selling price of \$40 was found in the stocktake of a business that marks everything up by 60%. To determine its cost price, use the following formula.

$$\text{Cost price} = \frac{\$40 \times 100}{100 + 60} = \frac{\$4000}{160} = \$25$$

The answer can always be checked by working from the cost price back to the selling price, as shown below.

$$\text{Mark-up} = 60\% \text{ of } \$25 = \$15$$

$$\text{Selling price} = \$25 + \$15 = \$40$$

Such a system assumes that selling prices and mark-ups don't change over time. If the mark-up hasn't been maintained because some inventory is sold at a reduced price, the system would have to be adjusted.

Computerised coding systems

Manual systems may be suitable for some small businesses, but they aren't practical if a business has a high number of daily sales. The information about cost prices must be copied from each price tag during the day, or all price tags must be removed at the point of sale and be collated later. This does not work for businesses that sell a high volume of goods, such as supermarkets.

A computerised system, based on product barcodes, overcomes this problem. Barcodes now appear on almost all products. A scanner used at the checkout can record many different types of financial information instantly. A barcode can include information such as the product's country of origin, the supplier of the goods, the cost price of the item and its selling price.

If a business can afford a barcoding system, they can generate valuable daily reports on things like:

- total dollar sales for the day
- total value of the cost of sales for the day
- number of units sold of each inventory item
- reorder requirements of each item of inventory.

To be useful, accounting information must be *timely* (see Chapter 1, page 9). A perpetual system that can generate a daily financial summary of inventory movements meets this demand.

Many small, sole-proprietor businesses may not have the funds to computerise their inventory systems, but on a smaller scale the principles remain the same. Cost prices can be recorded daily if the volume of sales isn't too high.



Computerised systems and barcode scanners help record high volumes of sales.

First-In, First-Out (FIFO) method

Perpetual inventory requires management to record a cost price at the actual time of sale. However, it's sometimes not possible to identify the actual cost.

For example, a petrol station has inventory on hand of 10 000 litres of fuel, costing \$1.00 per litre. The business then purchases an additional 10 000 litres of fuel at a cost of \$1.05 per litre. When the business sells 4000 litres of fuel the next day, what is the cost price of the sale – \$1.00, \$1.05, or an average of the two lots of inventory? As all the fuel mixes together, it's impossible to separate one lot of inventory from another.

Another possibility is to not apply an identified cost system. The time needed to code every single item, or the cost of a computerised inventory system, may discourage many small business owners from applying identified cost continuously through the reporting period.

If perpetual inventory is desirable, then a business may instead follow the **First-In, First-Out (FIFO) method**. This simplified system satisfies the demands of the perpetual system but is much easier to apply than the Identified Cost method.

For accounting purposes, FIFO assumes that the first goods purchased are the first goods sold. This is acceptable, because most trading businesses try to sell inventory in roughly the same order as they purchased it. Inventory should be rotated when new deliveries arrive, to prevent items from becoming shop-soiled from customer handling. Also, in the case of perishables such as foods, inventory becomes unsaleable if the item's use-by date has passed.

First-In, First-Out (FIFO) method a system of recording inventory costs, based on the assumption that the first goods purchased are the first goods sold

Identified Cost versus FIFO

To demonstrate the differences between the Identified Cost and FIFO methods, the purchases and sales details of a product for January 2028 are listed below.

PURCHASES					SALES		
1 Jan	Lot #1	50	units @ \$6.00	\$300	4 Jan	40	units from Lot #1 @ \$12.00 each
6 Jan	Lot #2	50	units @ \$6.20	\$310	9 Jan	30	units from Lot #2 @ \$12.50 each
13 Jan	Lot #3	50	units @ \$6.50	\$325	18 Jan	20	units from Lot #3 @ \$12.50 each
24 Jan	Lot #4	50	units @ \$6.60	\$330	31 Jan	50	units from Lot #4 @ \$12.90 each
Total		200	units	\$1265	Total	140	units

200 units purchased less 140 units sold = 60 units on hand

On 31 January, a physical stocktake reveals that 60 units were on hand after 140 units had been sold during the month. Two questions need to be answered in order to prepare the accounting reports for this business:

- What is the value of cost of sales to be reported in the income statement for January?
- What is the dollar value of inventory that will be reported in the balance sheet?

If the FIFO system is used, the 60 units in inventory would be valued as 50 @ \$6.60 and 10 @ \$6.50, for a total of \$395 ($50 \times \$6.60 = \$330$; $10 \times \$6.50 = \$65$; $\$330 + \$65 = \$395$). This is because the earlier purchases are assumed to be sold first.

The FIFO assumption gives the information below.

The FIFO method assumes that the first goods purchased are the first goods sold. Therefore, the items purchased @ \$6.00 and \$6.20, and 40 of the \$6.50 inventory, are assumed to have been sold. (The other 10 items purchased @ \$6.50 are assumed to remain in inventory at the end of the period.)

FIFO METHOD

Cost of sales			Inventory on hand		
50	units @ \$6.00	\$300	10	units @ \$6.50	\$65
50	units @ \$6.20	\$310	50	units @ \$6.60	\$330
40	units @ \$6.50	\$260			
140	units	\$870	60	units	\$395

To determine the cost of sales and a value for inventory on hand under an Identified Cost method, you need to examine the price tags of all the units. For example, a physical stocktake provides the following information.

The Identified Cost method identifies the actual cost price of all inventory sold. Therefore, the business can identify that the items in inventory include, for example, 10 @ \$6.00, 20 @ \$6.20 and 30 @ \$6.50. This means that the actual cost of sales would be the sum of 40 @ \$6.00, 30 @ \$6.20, 20 @ \$6.50 and 50 @ \$6.60.

IDENTIFIED COST METHOD

Cost of sales			Inventory on hand		
40	units @ \$6.00	\$240	10	units @ \$6.00	\$60
30	units @ \$6.20	\$186	20	units @ \$6.20	\$124
20	units @ \$6.50	\$130	30	units @ \$6.50	\$195
50	units @ \$6.60	\$330			
140	units	\$886	60	units	\$379

The actual cost prices of the goods that remain in inventory can be identified, which means the cost of goods sold can be easily determined.

Using the FIFO method will give you a different result to Identified Cost. Identified Cost is the preferred method, because it reports the situation as it *actually happened*. FIFO is only *an assumption* about what took place, so it's not necessarily as accurate. In the above example, FIFO writes off \$16 less as cost of sales for the period, and inventory on hand is \$16 higher. In a business that sells hundreds or thousands of different stock items daily, these small differences may become significant.

Discrepancies between the two methods tend to correct themselves over time, as one period's inventory at the end of the reporting period becomes the inventory on hand for the start of the next reporting period. Thus, over two consecutive periods, the differences between the two methods usually cancel each other out. Although FIFO may not reflect the actual inventory flow over a period, it's a completely acceptable method of inventory valuation. It also requires far less work than Identified Cost, so it's often the preferred method for small business owners.

EXAM-STYLE QUESTION

State and explain two reasons why a business owner may decide to use the First-In, First-Out (FIFO) method of cost allocation for their inventory, rather than the Identified Cost method. (4 marks)

Sample answer

Reason 1: *It's sometimes physically impossible to identify the cost price of inventory items.*

For example, a self-service shop selling loose nuts and grains may purchase its inventory items at different prices. However, the goods are mixed up when on display, so the owner can't identify the actual cost price of each item.

Reason 2: *Some businesses may use the simpler FIFO system because they don't have to label every single product with its identified cost price. For example, if a business sells numerous small items, FIFO is even more efficient if the owner simply applies the FIFO assumption to inventory flows.*

Exam advice

Pay attention to the marks allocated to each individual question. If the command word is *state*, there will usually be 1 mark for each correct statement. No further explanation is needed. However, *state and explain* requires a more detailed response, and in this case the question has been allocated 4 marks. Therefore, a simple statement without additional comment won't earn full marks. Always try to expand on your first statement or use an example to help explain your answer. In addition, look carefully at the terms used in the question (i.e. FIFO, cost allocation, inventory, Identified Cost method). Use this specialist, technical language in your answer to demonstrate your understanding of the question.

Don't suggest that FIFO ensures that the oldest inventory is sold first. This is simply not true, but many students provide this response. Always remember that FIFO is based on the assumption that the first goods purchased are the first goods sold. However, in reality this isn't always the case.



7.5 The role of inventory cards

inventory card a subsidiary record used to note down all movements of an individual inventory item

Trading businesses use **inventory cards** to keep track of inventory movements. The cards support the entries made to the Inventory account in the business's general ledger. Each card records the financial transactions of one particular inventory item. It should contain all the relevant details of the item. These details vary from business to business, but they usually include:

- the name (or description) of the item
- the product code number (if applicable)
- the name of the supplier
- the location of the item (particularly useful in larger businesses)
- the minimum and maximum number to be in inventory (when the minimum number is reached, the item is reordered back up to the maximum)
- the valuation method used (we will concentrate here on the FIFO method)
- all purchases and sales in relation to the product.

With all these details, the design of inventory cards can vary. As with all accounting records, an inventory card must suit the needs of the individual business. Figure 7.6 shows a typical inventory card for a perpetual inventory system. Like most modern accounting tools, an inventory card may be a digital record, such as a spreadsheet, rather than a physical card.

Figure 7.6 Inventory card for a perpetual inventory system

Inventory item: Sonya 100 cm TV		Product code: STV 84920			Valuation: FIFO			Min: 5	Max: 15	
Supplier: Wholesale Electricals		IN			OUT			Balance		
Date	Document	Qty	Cost	Total	Qty	Cost	Total	Qty	Cost	Total
1 Jul	Balance							5	480	2400
2 Jul	Invoice 843	10	490	4900				5	480	
								10	490	7300
3 Jul	Receipt 210				2	480	960	3	480	
								10	490	6340
4 Jul	Invoice 101				3	480	1440			
					2	490	980	8	490	3920
5 Jul	Receipt 211				3	490	1470	5	490	2450
6 Jul	Invoice 877	10	490	4900				15	490	7350

It is important that the balance of the inventory on hand is updated after every transaction.

This card shows five transactions over several days:

- July 1: five units are on hand, with each item costing \$480.
- July 2: 10 units are purchased on credit, as noted by Invoice 843. Note the impact on the 'Balance' column; the business now holds five units with a cost price of \$480 and 10 units at \$490. The cost prices of inventory purchased must be noted in the order of purchase so that the FIFO rule can be applied when inventory is sold.

- July 3: two units are sold for cash (Receipt 210). As the first inventory bought cost \$480 per unit, it's assumed this is the inventory that's sold. Two of the \$480 units are therefore moved to the 'Out' column, leaving three at \$480. All the \$490 inventory remains unsold at this stage.
- July 4: five units are sold (Invoice 101). The application of the FIFO rule is crucial here. The business still has three units left at a cost price of \$480 each, and 10 units at \$490 each. Because five units were sold, under the FIFO assumption three are given the cost price of \$480 each and the other two are \$490 each.
- July 5: only units with one cost price are left, so the three units sold on this day are allocated the cost price of \$490 each.
- July 6: 10 new units are purchased. With this purchase, the cost price is the same as that previously charged. In such a case, the units can simply be added to the existing inventory. This can *only* be done if the latest cost price is the same as the last lot of inventory purchased by the business.

Managing the use of inventory cards

When inventory is purchased at different prices, these cost prices must be recorded on the inventory card *in the order in which they occurred*. Cost prices may increase or decrease, but this doesn't affect the application of the FIFO rule. If the cost prices are noted in the order in which they occurred, the FIFO rule can be applied when inventory is sold.

Note, also, that all financial data recorded relates to the cost price of the inventory item. Its selling price (and any related GST) is irrelevant to the entries made in the inventory card.

For inventory cards to be an effective tool, they must be updated regularly, preferably every day. Timely information means that management can make better decisions about inventory levels, and about items that are selling well or poorly.

Inventory cards and the general ledger

The Inventory account (Figure 7.2 on page) is part of the double entry requirements of a trading business using perpetual inventory. Debits and credits are made to the Inventory account, with the usual cross-referencing to other general ledger accounts.

The Inventory account is used to record entries from the general journal for purchases, purchases returns, sales and sales returns. It doesn't show individual inventory details. The balance of the Inventory account at the end of a period should equal the total inventory on hand at that time.

Inventory cards are *not* part of the general ledger double entry process. They act as a subsidiary record to note the details of individual inventory items. The number of inventory cards a business uses depends on the number of different inventory items it sells, as a separate card is maintained for each line of inventory.

Table 7.3 shows the relationship between inventory cards and the Inventory account.

Table 7.3 The relationship between inventory cards and the Inventory account

General ledger	Subsidiary record
Inventory account	Inventory cards
• one single record for total inventory • no individual details of inventory items • updated continuously during the period	• many individual records • not part of double entry recording • updated continuously during the period

Internal control and inventory

As the perpetual system requires trading businesses to maintain two types of inventory records, they can use these as a control mechanism by checking the total of the individual inventory cards against the balance of the Inventory ledger account. As the two inventory records are created using the same transaction data, the final dollar amounts should always be the same.

Businesses may also identify recording errors by comparing the two sets of records. Correcting such errors before preparing final reports helps the business to maintain internal control over its inventory, one of its most important assets. This process also supports verifiability, as transactions can be checked against source documents if the two sets of records differ.

Internal control includes management practices and procedures designed to protect the assets of a business against theft or fraud. Protecting inventory in this way is vitally important, as a trading business may suffer a significant expense as a result of theft such as shoplifting. Typical procedures and practices in this area may include installing security cameras, using security tags on individual inventory items, keeping expensive inventory items in locked cabinets and having security personnel in the store or at exit points.

A schedule can be prepared for comparing and checking the two records, such as the one shown in Figure 7.7.

Figure 7.7 Schedule of inventory cards showing final balances

Inventory description	Product code	Quantity	Cost \$	Total cost \$
Sonya 60 cm OLED TV	OLED84920	30	200	6 000
Sonya 100 cm OLED TV	OLED84921	50	500	25 000
Kembrook Blu-ray recorder	KM84343	20	600	12 000
Kembrook Next 5G tablets	KM84392	10	850	8 500
Balance of Inventory ledger account				51 500

The total of all inventory cards should always equal the balance of the Inventory account in the general ledger.

It's important to be able to relate the entries in an inventory card to the double entries in the general ledger. The most obvious link between the two records is that the entries on the debit side of the Inventory account occur when inventory increases. These debits relate to the entries in the 'In' column on the inventory cards. Similarly, credits to the Inventory account relate to the 'Out' column on the inventory cards.

An important element is the 'Document' column on the inventory card (see Figure 7.6 on page). The source documents stated in this column indicate the nature of the transaction in each case and should always be stated for future reference (to support *verifiability*).

EXAM-STYLE QUESTION

Explain the relationship between the Inventory ledger account and inventory cards.

(2 marks)

Sample answer

An inventory card records the movements of an individual inventory item, whereas the Inventory account summarises the total movements of inventory. The entries in the 'In' column of an inventory card are represented as debit entries in the Inventory account. Entries in the 'Out' column of an inventory card are represented by credit entries in the Inventory account. Finally, the relationship between the two records is that the total of all inventory cards should be equal to the balance of the Inventory account at the end of the reporting period.

Exam advice

Your response to this question should be quite specific. Always think of inventory cards as being for *individual* inventory items, whereas the Inventory account is a *summary* of all inventory movements. You should also be able to describe the links between the two separate records. As with all *Explain*-type questions, always provide two separate points to demonstrate your knowledge.

Don't discuss the merits of FIFO or Identified Cost when responding to this type of question. Read every question carefully and respond to the particular question asked. Exam questions can change from year to year. Don't rely on an answer from a previous exam or a practice exam. Sometimes, students practise a model answer and simply repeat it, when it may no longer apply to this year's question.

7.6 Inventory losses and gains



One control mechanism already mentioned is to check inventory cards against the Inventory account in the general ledger. A second mechanism for checking the inventory records against the items on hand at a particular time is to do a physical stocktake. This will determine whether the situation shown in the inventory cards matches the actual inventory items in the business.

Two possible outcomes of a stocktake are an *inventory loss* or an *inventory gain*.

- An inventory loss occurs when the physical stocktake reveals an amount of inventory on hand that is less than that shown by the inventory cards.
- An inventory gain occurs when the physical stocktake figure is *higher* than the value indicated by the inventory cards.

Causes of losses and gains

Inventory losses may be caused by:

- undersupply by suppliers, when the number of items delivered to the store is less than the amount stated on the purchase invoice
- oversupply to customers, when more goods are supplied to customers than are stated on the sales invoice
- theft by customers, staff and others
- recording errors in the inventory cards, leading to an overstatement of the number of units that should be on hand
- duplicate invoices issued by a supplier, when a supplier accidentally invoices a business a second time
- stocktaking errors, such as when some goods aren't counted in the stocktake.

Inventory gains may be caused by:

- oversupply by suppliers, when the number of items delivered to the store is greater than the amount stated on the purchase invoice
- undersupply to customers, when fewer goods are supplied to customers than are stated on the sales invoice
- recording errors in the inventory cards, leading to an understatement of the number of units that should be on hand
- stocktaking errors, such as when some goods are counted twice in the stocktake.

The business's internal control mechanisms should pick up many of these issues. For example, undersupply by a supplier shouldn't occur, because all deliveries should be checked against the relevant invoices at the time of delivery. Any undersupply can then be addressed immediately.

However, despite the best internal control procedures, mistakes happen. For example, when staff perform stocktakes, they often work long hours through the night and can sometimes make counting errors.

The role of accounting is to reduce, if not eliminate, the variety of errors that can occur in any given reporting period.

Natural disasters can cause extensive inventory losses.



Shoplifting

The most common cause of a discrepancy between the two inventory figures is shoplifting. Many trading businesses experience some degree of shoplifting, and for retail outlets it can be very expensive.

Trading businesses are affected by shoplifting in two ways:

- When goods are stolen, the business suffers a loss equal to the cost of the item.
- The business may also suffer financially if it spends money on security to deter shoplifters, such as cameras or guards.

Because of shoplifting, most businesses usually suffer an inventory loss rather than an inventory gain.

Adjusting for an inventory loss

If an inventory loss or gain is revealed on balance day, the books must be adjusted to reflect the true situation.

An inventory loss occurs when the number of items identified in a physical stocktake is less than the number stated on an inventory card. When this occurs, the inventory card for that product must be adjusted to reflect the true situation. Information from the physical stocktake must be available before an adjustment for inventory loss can be made.

EXAMPLE 7.1

Yoshi Unlimited, a computer retailer, conducts a physical stocktake of Centrum Elite computers on 30 June. The stocktake reveals that 14 Centrum Elite computers were on hand. However, after the business sold one computer on 25 June, 15 units should have been in inventory. For some reason (possibly theft), one computer is missing. The inventory card is adjusted to reflect the true situation.

Note that the number of units on hand after the sale on 25 June was 15 units.

Inventory item: Centrum Elite computer		Product code: PC60333			Valuation: FIFO					
Supplier: Computer City		IN			OUT			Balance		
Date	Document	Qty	Cost	Total	Qty	Cost	Total	Qty	Cost	Total
1 Jun	Balance							10	1 500	15 000
4 Jun	Invoice 645				2	1 500	3 000	8	1 500	12 000
9 Jun	Invoice 646				3	1 500	4 500	5	1 500	7 500
15 Jun	Invoice 321	12	1 600	19 200				5	1 500	
								12	1 600	26 700
18 Jun	Invoice 667				1	1 500	1 500	4	1 500	
								12	1 600	25 200
25 Jun	Invoice 672				1	1 500	1 500	3	1 500	
								12	1 600	23 700
30 Jun	Memo 21				1	1 500	1 500	2	1 500	
								12	1 600	22 200

As only 14 units were counted in the stocktake, an adjustment for an inventory loss has been made on 30 June.

At the end of the month, 15 units should have been in inventory (3 + 12).

The FIFO assumption also applies to inventory losses. If items are lost, they are assumed to be the oldest items in inventory.

As Yoshi Unlimited is missing one computer, it's assumed to be the older inventory purchased, so the inventory loss is recorded as \$1500. Memo 21 is written to note the details of this event, and this document number is stated in the 'Document' column of the inventory card.

All inventory cards should be checked in this manner on balance day, by verifying the number of goods actually on hand and checking these details against what is stated in the individual inventory cards.

Whatever is recorded in the inventory cards must also be recorded in the Inventory account in the general ledger. The Inventory account must always represent a summary of inventory cards, and therefore it must be adjusted for all inventory losses. As usual, entries to general ledger accounts must originate in the business's general journal.

The loss of one Centrum Elite computer is the only inventory loss identified by Yoshi Unlimited in its stocktake. It records this loss of \$1500 in the general ledger.

GENERAL JOURNAL

Date	Details	Dr	Cr
30 Jun	Inventory loss	1 500	
	Inventory		1 500
	Adjustment for inventory loss as revealed by physical stocktake – loss of 1 Centrum Elite computer (Memo 21)		

This entry for the Inventory Loss account is then posted to the general ledger. Note: The Inventory account shown below includes an inventory balance of \$40 000.

INVENTORY

Date	Cross-reference	\$	Date	Cross-reference	\$
30 Jun	Balance	40 000	30 Jun	Inventory loss	1 500

INVENTORY LOSS

Date	Cross-reference	\$	Date	Cross-reference	\$
30 Jun	Inventory	1 500			

The adjusting entry for an inventory loss reduces the asset account Inventory (credit) and increases the expense account Inventory Loss (debit).

Yoshi's Inventory account indicates that \$40 000 of total inventory should have been on hand on 30 June. As one computer is missing, an inventory loss of \$1500 has occurred. The credit to Inventory of \$1500 decreases this asset account to the amount actually on hand: \$40 000 – \$1500 = \$38 500 inventory. This amount is reported in Yoshi Unlimited's balance sheet.

BALANCE SHEET (EXTRACT) AS AT 30 JUNE

Current assets	\$
Inventory	38 500

Adjusting for an inventory gain

An inventory gain occurs when the number of units actually on hand is greater than the number of units shown on an inventory card. This is an unusual event, as it seems that units of inventory have appeared from nowhere. In fact, inventory gains usually occur from recording errors, stocktaking errors, oversupply by the business's supplier or undersupply to the business's customers. So inventory gain usually comes from an error in the accounting system.

Regardless of the cause, both inventory cards and the Inventory account must be adjusted to reflect the actual situation on balance day.

EXAMPLE 7.2

Coffee Mundo has an inventory gain of two units recorded on 31 May. The physical stocktake reveals that 48 units were on hand, rather than 46 as indicated by the inventory card.

Inventory item: Classic coffee machine		Product code: CCM4300			Valuation: FIFO					
Supplier: Gilly Buyatt		IN			OUT			Balance		
Date	Document	Qty	Cost	Total	Qty	Cost	Total	Qty	Cost	Total
25 May	Invoice SD56	28	42	1 176				30	40	
								28	42	2 376
27 May	Invoice 255				5	40	200	25	40	
								28	42	2 176
28 May	Receipt 146				2	40	80	23	40	
								28	42	2 096
30 May	Invoice 265				4	40	160	19	40	
								28	42	1 936
31 May	Invoice 276				1	40	40	18	40	
								28	42	1 896
31 May	Memo 32	2	42	84				18	40	
								30	42	1 980

Adjustment for an inventory gain of two units, bringing the balance up to 48 units on hand.

The adjustment for the inventory gain increases the number of units shown in the inventory card – from 46 (18 + 28) to 48 (18 + 30).

When there is a gain, units should be recorded in the inventory card at the last cost recorded in the 'In' column of the inventory card. This is in response to the need for *faithful representation*. As it's not possible to know when the inventory gain happened, the business uses the most recent cost price it experienced, as this is the most relevant value at the end of the period.

As with an inventory loss, the adjustment for a gain must be recorded in the Inventory account.

The Coffee Mundo manager can't be sure which units were incorrectly recorded or wrongly supplied. The two units are recorded in the inventory card at the latest price recorded in the 'In' column of the inventory card (\$42), and the adjustment is recorded in the Inventory account.

GENERAL JOURNAL

Date	Details	Dr	Cr
31 May	Inventory	84	
	Inventory gain		84
	Adjustment for inventory gain as revealed by physical stocktake (Memo 32)		

INVENTORY

Date	Cross-reference	\$	Date	Cross-reference	\$
31 May	Balance	25 000			
31 May	Inventory gain	84			

INVENTORY GAIN

Date	Cross-reference	\$	Date	Cross-reference	\$
			31 May	Inventory	84

The adjusting entry for an inventory gain increases the asset account Inventory (debit) and the revenue account Inventory Gain (credit).

The Coffee Mundo Inventory account indicates that \$25 000 of total inventory should have been on hand on 31 May, but this is inaccurate because an error occurred during the period. The debit to Inventory of \$84 increases this asset account to the amount actually on hand.

Responding to inventory gains and losses

Although it's possible for an inventory gain to occur in a particular inventory card, theft from businesses will usually be greater than any required adjustments for inventory gains. Therefore, when adjusting the overall inventory for a business, an inventory loss may still exist.

The ability to identify inventory losses (not only the type of inventory missing, but also its cost) is a major advantage of the perpetual inventory system. Management can use this information to make appropriate decisions. Repeated inventory losses of a particular product, or in a specific department, may indicate a serious problem that needs attention.

Perpetual inventory should provide up-to-date information about all movements of inventory. Management can then be aware of any problems that may exist within the structure of the business in relation to inventory.

EXAM-STYLE QUESTION

The following Inventory account has been provided for your consideration. State the name of the source documents relevant to the entries labelled 1, 2 and 3. (3 marks)

INVENTORY					
Date	Cross-reference	\$	Date	Cross-reference	\$
	Balance	100 000		Cost of sales	60 000
1	Cash at bank	5 000	3	Inventory loss	5 000
2	Accounts payable	55 000		Balance	95 000
		160 000			160 000
	Balance	95 000			

Sample answer

1 EFT receipt

2 Purchase invoice

3 Memo

Exam advice

Questions about source documents feature in many final exams. You must be able to identify the various documents used by small businesses. However, you must also be able to link entries in ledger accounts with the source documents used to create those entries.

Don't simply state 'Invoice' when dealing with credit sales or credit purchases. State either 'Sales invoice' (for a credit sale) or 'Purchase invoice' (for a credit purchase). In the example shown above, the only acceptable response would be 'Purchase invoice'. *Don't* abbreviate this response in any way.

7.7 Donations of inventory for advertising purposes



Chapter 6 introduced transactions that involved the donation of goods to a charity, school or local community organisation (page 112). An example of such a transaction is shown in the general journal in Figure 7.8.

Figure 7.8 General journal entry for inventory used for advertising purposes

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 May	Advertising	100	
	Inventory		100

As donations of goods reduce the inventory held by a business, they affect the Inventory account. If the Inventory account is affected, so too is the inventory card of the goods being donated. The general journal entry in Figure 7.8 records the donation of two footballs to a school. The narration refers to Memo 51, and the cost price was recorded as \$50 each. This information would have originated in the inventory card for the footballs.

The FIFO assumption of inventory flow should be applied in the usual manner. Figure 7.9 shows the inventory card entry for the donation.

The business had 24 footballs in inventory on 30 April. When the two footballs were donated on 1 May, it was assumed they came from the \$50 inventory, as usual under the FIFO method. As a donation of goods isn't a common event, a memo should be made to record all the details.

Figure 7.9 Inventory card showing a donation of goods for advertising purposes

Inventory item: Footballs		Product code: ANFL6770			Valuation: FIFO					
Supplier: Sherrin Pty Ltd		IN			OUT			Balance		
Date	Document	Qty	Cost	Total	Qty	Cost	Total	Qty	Cost	Total
24 Apr	Invoice 757	20	52	1 040				10	50	500
								20	52	1 040
28 Apr	Receipt 121				2	50	100	8	50	400
								20	52	1 040
30 Apr	Receipt 124				4	50	200	4	50	200
								20	52	1 040
1 May	Memo 51				2	50	100	2	50	100
								20	52	1 040

When inventory is donated for advertising purposes, a memo is created as evidence of the transaction and the relevant inventory card is adjusted.

EXAM-STYLE QUESTION

The following data is a summary of the transactions for Hallam Hardware for the period just concluded.

Inventory as at 1 July 2027	\$120 000
Purchases for the year (all on credit)	\$270 000 plus GST
Sales for the year (all cash) – all sales marked up 100%	\$530 000 plus GST
Physical stocktake completed on 30 June 2028	\$118 000 (Memo 82)

In the general journal, **prepare** the relevant entry to account for the inventory loss or gain on 30 June 2028.

(3 marks) >>

» Workings

As this business applies a 100% mark-up to its inventory, the cost of sales figure would be half of the sales value:

$$\frac{\text{Sales } \$530\,000}{2} = \text{Cost of sales } \$265\,000$$

Therefore, your calculations should be as follows:

Inventory at start	120 000	Inventory value	\$125 000
+ Credit purchases	<u>270 000</u>	Stocktake result	<u>\$118 000</u>
	390 000	Inventory loss	\$ 7 000
Cost of sales	<u>265 000</u>		
Inventory balance should be:	125 000		

Inventory loss or gain: Loss of \$7 000

The difference between the physical stocktake and the calculated closing balance will be the inventory loss or gain.

$$\$125\,000 - \$118\,000 = \$7\,000 \text{ (loss)}$$

Note that the GST isn't recorded in the Inventory ledger accounts and therefore isn't relevant to the inventory value.

Sample answer

GENERAL JOURNAL

Date	Details	Dr	Cr
30 June	Inventory loss	7000	
	Inventory		7000
	Adjusting entry for inventory loss revealed by stocktake (Memo 82)		

Exam advice

You should receive 1 mark for each of the correct debit entry, the correct credit entry and the narration. Make sure that you complete the double entry, even if you aren't certain that your calculations are correct. Marks may still be awarded if you have shown some knowledge of the entry required. Also, be sure to show all your workings when provided with a 'workings box' in the exam. Your workings allow the assessor to see what you have included in your calculations. Don't simply use your calculator – always show how you determined the values used in your answer.

Don't abbreviate any of your titles. 'Inv. loss' will be marked as an error and will cost you marks. Always include a narration in your general journal entries, unless it's clearly stated that narration is *not* required. If it's been stated that a narration isn't required, *don't write one*, as it won't earn you any marks.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [7.1]** Inventory includes the goods that a trading business buys and sells to make a profit – in particular, the goods it has on hand or in its warehouse.
- [7.1]** A physical stocktake involves counting the units of inventory on hand at a particular point in time. It should be conducted every reporting period.
- [7.2]** The perpetual inventory process involves keeping records of all inventory movements during the reporting period and updating the balance of inventory on hand continuously. While it requires significant additional work and record keeping, it provides a lot of useful information for the business.
- [7.3]** The Inventory account is used to record a summary of all transactions affecting the inventory of a trading business. The balance of the Inventory account represents the total cost of inventory on hand at a point in time.
- [7.4]** The cost price of the inventory units sold by a trading business must be entered in the general journal on a continuous basis throughout the period. Cost prices must therefore be recorded in some way. The Identified Cost method identifies the actual cost of each item of inventory when it's sold.
- [7.4]** The First-In, First-Out (FIFO) method assumes that the first inventory purchased is the first inventory sold. The FIFO method may not reflect the actual inventory flow over a period, but it's an acceptable method of inventory valuation that requires less record keeping than the Identified Cost method.
- [7.5]** An inventory card is a subsidiary record used to record transactions for one particular inventory item. An inventory card should contain all the relevant details of the item. Inventory cards aren't part of the general ledger double entry process. They should be checked against the Inventory account.
- [7.6]** A physical stocktake may reveal losses or gains in inventory when compared to inventory cards. The cards should be corrected to show the loss or gain, and the correction noted and recorded in the general ledger.
- [7.7]** To keep track of the donation of goods for advertising purposes, the donation is recorded as a memo in the general journal, and the memo number is noted in the 'Document' column of the inventory card.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Inventory sheets

Jonathon Verri owns a small business trading as JV Hardware. He has just completed a physical stocktake and has provided the following information as at 30 June 2028.

Inventory item	Quantity counted	Cost price \$
Saws	25	20.00
Hammers	40	18.50
Drills	30	36.50
Wheelbarrows	10	150.00

Determine the value of inventory as at 30 June 2028.

2 Inventory sheets

Annette Ryan has just completed a physical stocktake for her business, which sells electrical goods. The following details have been provided.

Quantity	Inventory item	Cost price \$	Selling price \$
45	Toasters	25.90	42.95
30	Stick blenders	22.00	36.50
12	Microwave ovens	140.00	249.00
10	Waffle makers	29.30	46.50
14	Sandwich presses	22.50	39.75

Using the above details, calculate the value of inventory on hand.

3 Identifying cost

Nathan Pilon owns Pile-On Sport. He applies a mark-up of 50% to all inventory held. He has asked you to help him determine the cost prices of some of the goods sold. The following selling prices have been identified for the specified inventory items.

Cricket bats	\$300.00
Footballs	\$120.00
Football jumpers	\$75.00
Soccer balls	\$60.00
Netballs	\$30.00

Using the Identified Cost method, determine the actual cost of each individual inventory item at the end of the period.

Hint

Use the following formula:

$$\text{Cost price} = \frac{\text{Selling price} \times 100}{100 + \text{Mark-up}}$$



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EXERCISES



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4

Identifying cost

The physical stocktake for Mordialloc Menswear reveals the following items on hand as at 30 June 2028.

Item	Selling price	Mark-up applied
Ties	\$18	50%
Shirts	\$48	80%
Trousers	\$85	90%
Suits	\$290	120%

- Calculate the identified cost of each of the items listed.
- Prove your answers to part **a** by working from the cost prices back to the selling prices, using the mark-ups specified.



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5

Identified Cost versus FIFO

Diamond Valley Boutique purchased leather jackets on several occasions in 2028, as shown below.

21 Jan	Purchase lot #1	40 jackets @ \$245
28 Mar	Purchase lot #2	30 jackets @ \$249
26 Jun	Purchase lot #3	50 jackets @ \$252
12 Aug	Purchase lot #4	40 jackets @ \$252
30 Nov	Purchase lot #5	30 jackets @ \$255

On 31 December 2028, a physical stocktake shows that there are 45 jackets in inventory. A check of the price tags on these 45 jackets reveals the following:

- 20 jackets had a cost price of \$255
 - 20 jackets had a cost price of \$252
 - 5 jackets had a cost price of \$245.
- Use the Identified Cost method of inventory valuation to calculate the value of the cost of sales for leather jackets for the year ended 31 December 2028.
 - What is the value of inventory on hand as at 31 December 2028 under the Identified Cost method?
 - Use the FIFO assumption of inventory flows to calculate the value of the cost of sales for leather jackets for the year ended 31 December 2028.
 - What is the value of inventory on hand as at 31 December 2028 under the FIFO method?
 - Which method, Identified Cost or FIFO, will calculate the profit for this business most accurately? Explain your answer fully.

6 General ledger: Perpetual inventory

Docking's Collectables uses the perpetual inventory method. The owner of the business supplies the following details for the month of July 2028.

DOCKING'S COLLECTABLES: ACCOUNT BALANCES AS AT 1 JULY 2028

	\$		\$
Cash at bank	3 000	GST clearing	1 000
Accounts receivable	3 000	Accounts payable	7 000
Inventory	60 000	Mortgage loan	190 000
Shop fittings	28 000	Capital – J Docking	422 000
Premises	526 000		
	620 000		620 000

Transactions for July:

Jul	4	Sold goods that had cost \$400 for \$800 cash, plus GST of \$80 (Receipt 951)
	7	Bought goods on credit from Media Wholesalers for \$1200, plus GST of \$120 (Invoice 2848)
	9	Sold goods on credit (Invoice 613) to P Di Venuto for \$990, including GST of \$90 (cost price \$500)
	14	Paid assistant's wages \$700
	19	The owner withdrew \$300 in cash
	23	Di Venuto paid \$200 off his account in relation to the sale on 9 July
	27	Sold goods on credit for \$1000 to K O'Neill. GST added to invoice \$100 (cost price \$500)
	28	Paid assistant's wages \$700
	31	The owner donated \$250 worth of inventory items to the Portland Festival Culture Expo for a fundraising raffle, on the condition that the business name is featured on all raffle tickets printed. The donated goods would usually sell for \$450 (Memo 12)

- Record the above transactions in general ledger accounts.
(Note: Use one account for accounts receivable and one for accounts payable.)
- Prepare a trial balance as at 31 July 2028.
- Explain two advantages of perpetual inventory.

7 Identifying inventory loss or gain

The following information relates to the business of Preston Paints as at 31 December 2028.

Total sales for the period	\$142 000
GST on sales	\$14 200
Balance of the Inventory account in the general ledger	\$27 600
Inventory on hand according to physical stocktake	\$26 700

- Prepare a general journal entry to adjust the Inventory account for any inventory losses or gains that may have occurred. (Memo 15)
- Post the entry from part a to the Inventory account and balance the account.



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8

Identifying inventory loss or gain

The owner of Classic Trophies provides the following information about her business.

Balance of inventory as at 1 July 2027	\$17 500
Credit purchases made during the year	\$52 000
GST on purchases	\$5 200
Total sales for the year – selling price	\$95 000
– cost price	\$43 600
– GST on sales	\$9 500
Total of physical stocktake on 30 June 2028	\$25 700

- Prepare the Inventory account as it would appear in Classic Trophies' general ledger. Your account should show all relevant entries, including adjustments for inventory losses or gains, and a final balance for inventory on hand at the end of the period.
- Suggest two strategies the management of a retail store can adopt to reduce inventory losses.



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9

Recording in the general ledger

The following information relates to the business of Sneakergirl.

Balance of inventory as at 1 November 2027	\$34 200
Total of inventory sheets completed on 31 October 2028	\$39 980
Credit purchases made during the year	\$62 000
GST on credit purchases	\$6 200
Cash purchases made during the year	\$23 400
GST on cash purchases	\$2 340
Cash sales for the year – selling price	\$125 000
– GST collected	\$12 500
– cost price	\$63 600
Credit sales for the year – selling price	\$32 890
– GST charged	\$3 289
– cost price	\$16 240

- Prepare the following general ledger accounts: Inventory, Cost of Sales, GST Clearing, and Inventory Loss (or Gain).
- Show how the adjustment for the inventory loss (or gain) would appear in the general journal. (Memo 11)
- Give two possible reasons for the inventory loss (or gain).

10 Identified Cost versus FIFO

The manager of Third Dimension Print Supplies uses the FIFO method of valuing inventory. The following details relate to one inventory item, the AP540 printer.

Jul	1	Six printers in inventory with a cost price of \$300
	4	Sold for cash two printers for \$540 each, plus GST of \$54 (Receipt 65)
	8	Purchased on credit 10 printers for \$3200, plus GST of \$320 (Invoice 9211)
	14	Sold one printer on credit for \$560, plus GST of \$56 (cost price \$300) (Invoice 322)
	24	Donated a printer to the local school and received publicity in the school newsletter (cost price \$320) (Memo 32)
	28	Cash sales: four printers for \$560 each, plus GST of \$56 (Receipts 68–71). Cost price of printers sold \$320 each
	31	Physical stocktake found 7 printers still in the shop: 3 cost \$300 each, the other 4 cost \$320 each (Memo 33)

- Prepare an inventory card for the AP540 printer using the Identified Cost method.
- Assuming that the information relating to cost prices wasn't available, prepare the inventory card using the FIFO assumption.
- Using the Identified Cost method, prepare the following general ledger accounts using the transactions above: Inventory and Cost of Sales.
- Explain why the management of some trading businesses may decide to adopt FIFO to value inventory, rather than using the Identified Cost method.

11 Identified Cost versus FIFO

The following information relates to the purchases and sales of product number UZ927 during June 2028. On 1 June, there were 10 units of UZ927 on hand with a cost price of \$14 each.

Purchases			Sales		
Invoice 64	2 Jun	50 units @ \$14 each	3 Jun	40 units @ \$28 each	Invoice 132 (cost price \$14)
Invoice 69	4 Jun	40 units @ \$15 each	5 Jun	15 units @ \$28 each	Invoice 135 (cost price 5 @ \$14, 10 @ \$15)
Invoice 84	14 Jun	50 units @ \$16 each	12 Jun	30 units @ \$30 each	Invoice 142 (cost price \$15)
			20 Jun	20 units @ \$30 each	Invoice 164 (cost price 10 @ \$14, 10 @ \$16)
			29 Jun	20 units @ \$32 each	Invoice 168 (cost price \$16)

On 30 June, a physical stocktake reveals 22 units on hand (Memo 12). Two of these units were coded as having a cost price of \$14, with the remainder costing \$16.

- Using the Identified Cost method, prepare an inventory card for product UZ927 for June.
- The manager asks you to redraft the inventory card using the FIFO inventory assumption to show the differences in valuation methods.
- Explain to the owner the effect on profit for June if the FIFO method is used instead of Identified Cost.
- Using the transactions listed and your inventory card from part **b**, prepare the following general ledger accounts: Inventory and Sales.



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12 Inventory card: FIFO

The following information was extracted from an inventory card prepared under the FIFO assumption. The inventory card includes all transactions in relation to this inventory item for April 2028.

INVENTORY CARD

		IN			OUT			Balance		
Date	Document	Qty	Cost	Total	Qty	Cost	Total	Qty	Cost	Total
9 Apr	Receipt 121				4	50	200	9	50	450
								20	52	1040
26 Apr	Invoice 812				5	50	250	4	50	200
								20	52	1040

- Explain the difference between the transactions that have been recorded on 9 April and 26 April.
- If there were no more transactions during April, how many units should be on hand as at 30 April?
- If a physical stocktake completed on 30 April revealed that there were 22 units in inventory, what is the value of the inventory loss or gain experienced by this business?
- Justify why an adjustment for inventory loss/gain should be made on 30 April. (Refer to one qualitative characteristic and one accounting assumption.)



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13 Inventory card: FIFO

Lisa Grass is the owner of Perfumes Online. She provides the following extract from one of her inventory cards. It relates to a product named Temptation, which sells for \$70 per bottle.

INVENTORY CARD: TEMPTATION PERFUME

		IN			OUT			Balance		
Date	Document	Qty	Cost	Total	Qty	Cost	Total	Qty	Cost	Total
22 May	Invoice 2919				3	35	105	2	35	70
27 May	Invoice 31456	50	37	1850				2	35	70
								50	37	1850

- On 30 May, Grass sold five bottles of Temptation perfume for cash at \$70 per bottle (Receipt 143). Record this transaction in the inventory card, using the FIFO method of cost allocation.
- A physical count of inventory done on 31 May showed that 49 bottles of Temptation were still in inventory. Record the necessary adjustment in the inventory card, with reference to Memo 314.
- Refer to the transaction recorded on 27 May. Should Grass adjust her selling price of Temptation? Explain your answer fully and, if necessary, suggest a new recommended selling price for this product.

14 Multiple inventory cards

Trinelle Galea owns Brunswick BBQs. The business sells two different models of gas grill, the Standard and the Deluxe. An inventory card is maintained for each model, using the FIFO method. On 1 August 2028, the general ledger included the following balances.

	\$		\$
Cash at bank	1 280	Accounts payable	3 000
Accounts receivable	3 000	GST clearing	2 000
Inventory	5 720	Mortgage loan	100 000
Premises	250 000	Capital	155 000
	260 000		260 000

The transactions for August 2028 are listed below.

Aug 1	Inventory on hand – Deluxe 10 @ \$380, Standard 6 @ \$320
2	Cash sales of two Deluxe models for \$650 each, plus GST of \$65 (Receipts 101, 102)
4	Cash sales of three Standard models for \$620 each, plus GST of \$62 (Receipts 103–105)
7	Sold for cash three Deluxe models for \$650 each, plus GST of \$65 (Receipts 106–108)
9	Purchased on credit eight Standard models at \$340 per unit, plus GST of \$34 (Invoice 535) from BBQs Plus
11	Sold for cash three Deluxe models at \$650 each, plus GST of \$65 (Receipts 109–111)
14	Sold for cash four Standard models at \$620 each, plus GST of \$62 (Receipts 112–115)
17	Purchased 10 Deluxe models on credit for a total of \$3900, plus GST of \$390 (Invoice 919) from BBQs 'R' Us
22	Cash sales of one Standard model for \$630 (plus GST of \$63) and one Deluxe model for \$660 (plus GST of \$66) (Receipts 122, 123)
26	Cash sales of three Standard models at \$693 each (including GST of \$63) (Receipts 124–126)
31	A physical stocktake showed that 3 Standard models and 10 Deluxe models were on hand (Memo 92)

- a** Prepare the individual inventory cards for the two models being sold.
- b** Adjust the inventory cards for any inventory losses or gains revealed by the stocktake.
- c** Prepare the following general ledger accounts for August 2028: Inventory and Inventory Loss (or Gain).
- d** Balance the Inventory account and reconcile it with the two inventory cards prepared in part **a**.



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15 Multiple inventory cards

Optima Cameras sells two models of digital cameras, the All-Pro 8 and the All-Pro 9. It uses the perpetual inventory system to record all inventory movements.

	\$		\$
Cash at bank	2 350	Accounts payable	6 000
Accounts receivable	4 000	GST clearing	2 500
Inventory	13 650	Bank loan	18 000
Shop fittings	85 000	Capital	78 500
	105 000		105 000

The transactions for July 2028 are listed below.

Jul	1	Inventory on hand: All-Pro 8: five units in inventory; three with a cost price of \$1150 and two with a cost of \$1100; All-Pro 9: five units with a cost of \$1600
	3	Sold for cash one All-Pro 9 camera for \$2900, plus GST of \$290 (Receipt 633) and two All-Pro 8 cameras for \$2100 each, plus GST of \$210 (Receipt 634)
	4	Purchased on credit six All-Pro 8 cameras for \$1180 each, plus GST of \$118 (Invoice 838) from Ace Cameras
	5	Cash sales of two All-Pro 8 cameras for \$2200 each, plus GST of \$220 (Receipt 635) and one All-Pro 9 camera for \$2900, plus GST of \$290 (Receipt 636)
	8	Purchased on credit six All-Pro 9 cameras for \$1870 each, including GST of \$170 (Invoice 923) (Ace Cameras)
	10	Sold for cash two All-Pro 9 cameras at \$2900 each, plus GST of \$290 (Receipt 637)
	16	Sold for cash three All-Pro 8 cameras for \$2200 each, plus GST of \$220 (Receipts 638–640) and two All-Pro 9 cameras for \$3200 each, plus GST of \$320 (Receipts 641, 642)
	21	Purchased on credit 10 All-Pro 8 cameras for \$1210, including GST of \$110 (Invoice 852) (Ace Cameras)
	24	Sold one All-Pro 9 and one All-Pro 8 camera for cash: \$3100, plus GST of \$310 and \$2100, plus GST of \$210, respectively (Receipts 645, 646)
	31	A physical stocktake showed that 11 All-Pro 8 cameras and 5 All-Pro 9 models were in inventory (Memo A21)

- Using the FIFO method, prepare the individual inventory cards for the two models being sold, including any adjustments required for inventory losses or gains.
- Prepare the following general ledger accounts: Inventory and GST Clearing.
- Balance the Inventory account and reconcile it with the two inventory cards prepared in part **a**.
- Balance the GST Clearing account. Under what classification would you report this account? Explain your answer fully.

16 Multiple inventory cards

Steph Serafidis owns Western Blinds, a small business that sells two sizes of venetian blinds as part of its range of products. The smaller size is designed for a single window and usually sells for \$250 per unit, plus GST. The larger size is suitable for a double window and usually sells for \$450 per unit, plus GST. Serafidis applies the FIFO method to her business's inventory cards. The following transactions occur during June 2028.

Jun	1	Inventory on hand: Singles: 25 blinds, 10 with a cost price of \$120 and 15 with a cost price of \$125. Doubles: 15 blinds, all costing \$230 each
	3	Sold six single blinds for \$250 each (cash) (Receipt 139)
	5	Sold three double blinds for \$450 each (cash) (Receipt 140)
	7	Sold five double blinds for \$450 each (cash) (Receipt 141)
	9	Purchased 25 more double blinds at a cost of \$240 each (Invoice 7546)
	11	Sold six single blinds for \$260 each (cash) (Receipt 142)
	14	Sold five double blinds for \$2150 to Carlton College (Invoice 1333)
	17	Purchased 30 single blinds for \$127 each (Invoice 7566)
	19	The owner donated two single blinds to the local cricket club. The club secretary has agreed to hang a sign in the clubrooms to advertise Serafidis's business (Memo 82)
	23	Sold six double blinds for \$450 each (cash) (Receipt 144)
	25	Sold one single and one double blind for a total of \$700 (Receipt 145)
	30	A physical stocktake revealed the following quantities on hand at the end of the month: single blinds: 37, double blinds: 18 (Memo 83)

- Prepare an inventory card for each of the two types of blinds sold by Western Blinds.
- Adjust your inventory cards for any inventory losses or gains revealed by the 30 June stocktake.
- If Western Blinds only sold these two inventory items, what should the balance of the Inventory account be as at 30 June 2028?

ETHICAL CONSIDERATIONS

Rosa Mondio is the owner of Phonelife, a small business that sells a range of smartphone accessories. When she purchases inventory, Mondio usually applies a mark-up of 100% on the cost price. She has just received a delivery from her main supplier, a very large company. The invoice she received with the goods clearly states:

- 5 phone cases @ \$10.00 each, plus \$1.00 GST

However, when Mondio opened the box, she discovered that there were five *dozen* phone cases packed in the box! She found her copy of her order form and it clearly states 5 units, not 60. She's not sure what she should do. The following are her options:

- She could say nothing and make some extra money. Fifty-five free phone cases will generate a good profit. Business has been slow recently and this would certainly help. After all, the supplier is such a big company – they can afford it!
- She could keep some of the cases and advise the supplier that 25 extras were delivered. This would allow her to make some extra profit, without being too greedy.
- She could notify the supplier immediately. Mistakes can be made when goods are shipped out, and it isn't right to keep the goods.

What would you do in this situation? Discuss the pros and cons of the various options and make a recommendation to Mondio as to what she should do.



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XL template

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain two causes of an inventory gain.

Question 2 (2 marks)

On 30 April, the owner of Catena's Cheese Shop, Oscar Catena, took some products home from his shop for a family party on the weekend. The goods had a selling price of \$120 and all his inventory is sold at a mark-up of 50%. **Prepare** the relevant general journal entry to record this transaction. Narration is not required.

Question 3 (2 marks)

State the effect on owner's equity in the balance sheet if drawings of inventory haven't been recorded.

Question 4 (3 marks)

Explain, with reference to an accounting assumption, why a physical stocktake should be completed on balance day.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

Sales returns and purchases returns

KEY TERMS

Credit note
Purchases return
Sales return

This chapter focuses on how to record sales returns and purchases returns in the general journal using credit notes, before they are posted to the relevant general ledger accounts.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the purpose of a credit note [8.1]
- **describe** when a credit note will be issued [8.1]
- **prepare** general journal entries to record when goods are returned to suppliers [8.2]
- **post** entries for the return of goods to the general ledger [8.2]
- **prepare** general journal entries to record when customers return goods [8.3]
- **post** entries for sales returns to the general ledger [8.3]
- **explain** why two double entries are required when sales returns are recorded under the perpetual inventory system [8.4]
- **record** sales returns and purchases returns in inventory cards, using the Identified Cost and FIFO methods [8.5]

PRIOR KNOWLEDGE

CHAPTER 3: Accounting systems and business documents

CHAPTER 4: Double entry recording: An introduction

CHAPTER 7: The perpetual inventory system



Estimated time required: 1 week





8.1 Credit notes for returns

When a trading firm buys goods on credit, it receives a purchase invoice. When it provides goods on a credit basis, it issues a sales invoice.

Sometimes, invoiced goods may be considered unsatisfactory because they are:

- the wrong size
- the wrong brand
- the wrong colour or style
- delivered late and are no longer required
- damaged or faulty.

This may occur when a business buys goods from a supplier or when it sells goods to a customer. In such a situation, the supplier or the business may replace the goods or issue a credit note. A **credit note** is a business document used to acknowledge that goods have been returned. Figure 8.1 shows an example.

credit note a source document used to acknowledge the return of goods

Figure 8.1 A typical credit note

Wholesale Trading
123 Power Avenue,
Balwyn VIC 3103
Credit Elsternwick Electricals
898 Nepean Highway
Elsternwick VIC 3185

CREDIT NOTE no. 3389
Date 10/7/28
Reason Damaged in transit

Description	Quantity	Unit price	Subtotal	GST	Total
Leadlight touch lamps	4	\$42.50	\$170.00	\$17.00	\$187.00
Totals			\$170.00	\$17.00	\$187.00

Approved Ken Sparkie

Wholesale Trading - for all things electrical

Total (excluding GST) \$170.00
Total GST payable \$17.00
Total amount payable (including GST) \$187.00



8.2 Purchases returns

In the credit note in Figure 8.1, the supplier, Wholesale Trading, acknowledges that Elsternwick Electricals has returned damaged goods (a **purchases return**). Elsternwick Electricals then debits its Accounts Payable – Wholesale Trading account, reducing the amount it owes to the supplier by \$187. (Wholesale Trading had charged Elsternwick Electricals \$187 when it originally issued the purchase invoice for the goods.)

In addition to the cost price, the credit note records the GST charged on the credit purchase. The following is a summary of the effect of both a credit purchase and a purchases return. On the left is the double entry for the original credit purchase, with the return of the damaged goods shown on the right.

Credit purchase (invoice)	\$	Purchases return (credit note)	\$
Inventory	170 Dr	Accounts payable	187 Dr
GST clearing	17 Dr	Inventory	170 Cr
Accounts payable	187 Cr	GST clearing	17 Cr

purchases return the return of goods by a business to its supplier (accounts payable)

The summary shows the entries that are required when *all* the goods purchased from accounts payable are later returned and a credit note is granted. In some situations, only some of the goods are returned; for example, a business purchases 10 items and returns only two of them. In this case, you should identify just the cost price of the two goods being returned, and the GST that was charged on them at the time of purchase.



Faulty stock is returned to the supplier and a purchases return is recorded.

As with all business documents, credit notes are entered in the general journal before being posted to the general ledger accounts. For example, Elsternwick Electricals would record the return of goods in its general journal as shown in Figure 8.2.

Figure 8.2 General journal entry to record purchases returns

GENERAL JOURNAL			
Date	Details	Dr	Cr
10 Jul	Accounts payable – Wholesale Trading	187	
	Inventory		170
	GST clearing		17

Recording purchases returns

A business using the perpetual inventory method must record all movements of inventory in its Inventory account. When it purchases goods from a wholesaler, it debits the Inventory account and credits Accounts Payable. If it then returns the goods, it makes the opposite entry. The debit to Accounts Payable reduces its liability, while the credit to Inventory reduces the cost of inventory on hand.

To create a realistic situation, the following information is also provided. In the general ledger of Elsternwick Electricals as at 1 July, the outstanding debt to Wholesale Trading was \$3000 and the balance of inventory was \$25 000. When the return of damaged goods is posted, it results in the ledger account entries shown in Figure 8.3.

Figure 8.3 General ledger entries for a purchases return

ACCOUNTS PAYABLE – WHOLESALE TRADING					
		\$			\$
10 Jul	Inventory/GST clearing	187	1 Jul	Balance	3 000

INVENTORY					
		\$			\$
1 Jul	Balance	25 000	10 Jul	Accounts payable	170

GST CLEARING					
		\$			\$
			10 Jul	Accounts payable	17

Returns of inventory to suppliers cause a decrease in the inventory held by the business.

The Accounts Payable account shows the effect of the supplier's credit note. The debit entry reduces Elsternwick Electricals' obligation to the account payable, so it now owes \$187 less to Wholesale Trading.

Similarly, inventory is reduced. The credit entry to the Inventory account reduces the inventory on hand, as the firm no longer possesses the goods. The credit entry to the GST Clearing account cancels out the debit entry that would have been made to that account at the time of purchase.



8.3 Sales returns

sales return the return of goods by a customer (accounts receivable) to a business

In the previous example of a purchases return, Elsternwick Electricals received a credit note from its supplier. However, Elsternwick Electricals can also issue credit notes to its accounts receivable to acknowledge a **sales return**. Consider the following transactions between this business and one of its credit customers:

- 1 Aug: Sold goods on credit to Brimbank Grammar School: four light fittings for \$80 each, plus GST of \$8 each.
- 5 Aug: Brimbank Grammar School returned one light fitting because it was the wrong size. The customer was allowed a full credit of \$80 (plus GST of \$8).

Note: Elsternwick Electricals applies a mark-up of 100% to all its inventory. Therefore, the cost of sales on 1 August, using the Identified Cost method, would be \$160 ($4 \times \$40$), and the return on 5 August would have a cost price of \$40.

When the goods are returned on 5 August, the business issues a credit note and makes a general journal entry to record the sales return (see Figure 8.4).

Figure 8.4 General journal entry to record a sales return

GENERAL JOURNAL

Date	Details	Dr	Cr
5 Aug	Sales returns	80	
	GST clearing	8	
	Accounts receivable – Brimbank Grammar		88
	Inventory	40	
	Cost of sales		40

Always remember to keep the selling price entries separate from the cost price entries.

Recording sales returns

Under perpetual inventory, two double entries are made when goods are sold: one to record the selling price and the other to record the cost price. This is also the case when goods are returned for credit, as in the above example.

When the customer returned the light fitting because it was the wrong size, two events had to be recorded.

- The Accounts Receivable account had to be reduced by the amount the customer was originally charged ($\$80 + \$8 \text{ GST} = \$88$). This results in debits to the Sales Returns and GST Clearing accounts and a credit entry to the Accounts Receivable account.
- The goods returned by the customer become part of the firm's inventory again. To record this, it reverses the cost price entry it made when it sold the goods. It debits Inventory to increase this asset account and credits the Cost of Sales account. This credit entry negates the debit to Cost of Sales that it recorded when the sale took place.

The following summary demonstrates these two events.

Credit sale of goods			Sales returned by an accounts receivable		
Accounts receivable	Dr		Sales returns	Dr	
Sales		Cr	GST clearing	Dr	
GST clearing			Accounts receivable		
(with selling price)		Cr	(with selling price)		Cr
Cost of sales	Dr		Inventory	Dr	
Inventory (with cost price)		Cr	Cost of sales (with cost price)		Cr

Note that a sale of inventory affects five accounts. When a sales return occurs, it also affects five accounts.

The entries in the general ledger would appear as shown in Figure 8.5. (Note that four units were sold on credit, but only one was returned.)

Figure 8.5 General ledger entries for a sales return

INVENTORY					
		\$			\$
1 Aug	Balance	10 000	1 Aug	Cost of sales	160
5 Aug	Cost of sales	40			

The cost of sales account is debited when a sale is made and credited when a sales return is recorded.

COST OF SALES					
		\$			\$
1 Aug	Inventory	160	5 Aug	Inventory	40

ACCOUNTS RECEIVABLE – BRIMBANK GRAMMAR					
		\$			\$
1 Aug	Sales/GST clearing	352	5 Aug	Sales returns/GST clearing	

CREDIT SALES					
		\$			\$
			1 Aug	Accounts receivable – Brimbank Grammar	320

SALES RETURNS					
		\$			\$
5 Aug	Accounts receivable – Brimbank Grammar	80			

GST CLEARING					
		\$			\$
5 Aug	Accounts receivable – Brimbank Grammar	8	1 Aug	Accounts receivable – Brimbank Grammar	32

The correct amount of GST must be recorded on all sales returns. When the four units were sold at \$80 each, GST of \$32 (\$8 per unit × 4 = \$32 GST) was charged to the accounts receivable. When one item was returned, the related GST was the \$8 per unit originally charged to the accounts receivable.

Sales Returns account

The selling price of the goods returned (\$80) was debited to a Sales Returns account in the general ledger. This entry could instead be debited to the Sales account, with sales adjusted to equal the revenue earned after recording the returns. However, a net sales figure reported at the end of the period in the income statement wouldn't show any information about the level of returns by customers. Best accounting practice is to create a separate account for sales returns, which can then be deducted from sales revenue in the income statement. This separate account provides additional information for management about customer satisfaction.

INCOME STATEMENT (EXTRACT)

Revenues	\$	\$
Sales	100 000	
Less: Sales returns	5 000	95 000

The reporting of sales returns in this way allows the reader of the report to see the full picture in terms of the firm's sales performance. Although \$100 000 worth of goods was sold during the year, goods valued at \$5000 were returned by customers.

This can be expressed as a percentage to assess the level of customer satisfaction. During this reporting period, 5% of all sales (\$5000/\$100 000) were returned. If this percentage decreases over time, it may indicate that customer satisfaction has improved. If it increases, it indicates that more customers were unhappy with the business.

EXAM-STYLE QUESTION

Explain the effect of a sales return on the accounting reports of a trading business.

(3 marks)

Sample answer

A sales return from an accounts receivable has no effect on the cash flow statement as the Bank account isn't affected. In the income statement, both net sales and the cost of sales for the period will be decreased. Overall, the effect would be a decrease in the profit being reported. In the balance sheet, accounts receivable, the GST liability and the owner's equity would all decrease, as a lower profit is being reported.

Exam advice

The effect of various transactions on the accounting reports is a popular question in exams. As there are three key accounting reports (the cash flow statement, the income statement and the balance sheet), you should always comment on all three. *Don't* ignore a report even if you believe there is no effect on it. In the example above, where there was no effect on the cash flow statement, you will demonstrate knowledge by stating that the cash flow statement isn't affected. When commenting on the balance sheet, make sure that you cover all aspects of the accounting equation (assets, liabilities and owner's equity).

8.4 Recording returns in inventory cards



Returns affect the amount of inventory a business holds, so it must record them in its inventory cards. Returns of inventory to a supplier decrease the inventory on hand, while sales returns increase the inventory a business holds at a given date.

To record returns, the two types of transactions can simply be related to the headings used in inventory cards. As returns to suppliers mean that goods are leaving the business, record these purchases returns in the Out column. If accounts receivable return goods to a business, this means that goods are coming back into the firm and therefore should be recorded in the In column.

The other method is to show all debits to the Inventory Control account in the In column of an inventory card and all credits in the Out column.

How transactions affect inventory cards

Table 8.1 shows the various transactions covered so far in this text. The entries on the debit side relate to the In column of the inventory cards the business maintains. The credit entries relate to the Out column.

The two entries affected for returns of inventory (sales returns and purchases returns) are numbers 4 and 7.

Table 8.1 How transactions affect inventory

Debit		Credit	
1	Balance	6	Cost of sales
2	Cash at bank	7	Accounts payable
3	Accounts payable	8	Drawings
4	Cost of sales	9	Advertising
5	Inventory gain	10	Inventory loss
		11	Balance

Sales returns by accounts receivable require a cost of sales entry on the debit side of the Inventory account.

Purchases returns to accounts payable result in a credit entry to the Inventory account.

- 1 The *opening balance* of inventory is on the debit side because it is an asset account.
- 2 *Cash at bank* records the cash purchases of inventory made during the period.
- 3 *Accounts payable* is the cross-reference for the total credit purchases made during the period.
- 4 *Cost of sales* is the cost price of sales returns approved for the period. Goods are coming back into the business, so inventory increases and a debit entry is made.
- 5 *Inventory gain*: if the physical stocktake reveals that an inventory gain has occurred, a debit is made to Inventory to adjust the account up to the correct amount.
- 6 *Cost of sales*: if a business sells on credit in addition to cash sales, there may be multiple entries named 'Cost of sales'.
- 7 *Accounts payable* is used to record the returns of inventory to suppliers. Inventory is leaving the business and being returned to the supplier, so Inventory must be credited.
- 8 *Drawings* shows withdrawals of inventory by the proprietor.
- 9 *Advertising* represents inventory given to other entities for advertising purposes.
- 10 *Inventory loss* is a balance day adjustment for losses revealed by the stocktake.
- 11 *Balance* is the amount of inventory on hand at the end of the period.

Recording purchases returns in inventory cards

We have established how sales returns and purchases returns affect the Inventory account. The final question now is what price to record in an inventory card when a return occurs.

Consider the inventory card in Figure 8.6.

Figure 8.6 Inventory card showing a credit purchase

Inventory item: Classic chairs		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Aug	Balance							5	12	60
2 Aug	Invoice 78	10	13	130				5	12	60
								10	13	130
3 Aug	Receipt 213				2	12	24	3	12	36
								10	13	130

This inventory card includes an entry for a credit purchase on 2 August, when 10 chairs were purchased (Invoice 78). This is followed by a cash sale on 3 August, when two chairs were sold with a cost price of \$12 each. The next transaction was on 4 August, when the customer found that three of the chairs it purchased on 2 August were damaged and returned them to the supplier. The supplier approved the return and issued Credit note 12 for \$39 (3 × \$13). Figure 8.7 shows the inventory card entry required.

Figure 8.7 Inventory card showing a purchases return

Inventory item: Classic chairs		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Aug	Balance							5	12	60
2 Aug	Invoice 78	10	13	130				5	12	60
								10	13	130
3 Aug	Receipt 213				2	12	24	3	12	36
								10	13	130
3 Aug	Credit note 12				3	13	39	3	12	36
								7	13	91

Note that purchases returns have *nothing* to do with the FIFO assumption. The supplier will always determine the actual value of any credit it allows when goods are returned, as shown on the credit note it issues.

You should always record a purchases return at the value determined by the supplier's credit note, then adjust the Balance column as required. Once you have adjusted the inventory card, you can continue using the FIFO assumption to determine the cost of sales when goods are sold.

Recording sales returns in inventory cards

The method of recording sales returns is different from that used to record purchases returns.

The earlier example showed how the supplier determines the dollar value of a purchases return. However, when a business sells goods, it uses either the Identified Cost method or the FIFO assumption to determine the cost of sales to be recorded. This is an internal decision by management, and the dollar value isn't included on any source document.

When a business sells goods to a credit customer, it states the selling price on its sales invoice and uses the inventory card to record the cost price of the goods sold.

The question now is: what is the cost price of a sales return? If the business uses the Identified Cost method, it would have to identify the sales transaction in the inventory card so that it can also identify the cost price of the sales return.

Consider the inventory card in Figure 8.8.

Figure 8.8 Inventory card using Identified Cost

Inventory item: Office desks		Valuation method: Identified Cost								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Aug	Balance							2	100	200
								5	120	600
2 Aug	Invoice 201				2	120	240	2	100	200
								3	120	360
3 Aug	Invoice 202				2	100	200	3	120	360

An account receivable returned one office desk on 4 August, and the customer was granted full credit. The original sale to this customer was made on 2 August. The Identified Cost method is being used, so the order of sales and sales returns isn't important because the actual cost of the items must be identified. Therefore, if the sale was made on 2 August, the actual cost price of the sales return will be \$120.

The inventory card would be adjusted as shown in Figure 8.9.

Figure 8.9 Inventory card using Identified Cost

Inventory item: Office desks		Valuation method: Identified Cost								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Aug	Balance							2	100	200
								5	120	600
2 Aug	Invoice 201				2	120	240	2	100	200
								3	120	360
3 Aug	Invoice 202				2	100	200	3	120	360
4 Aug	Credit note 32	1	120	120				4	120	480

Sales returns and the FIFO method

The process of recording a sales return at cost price is straightforward when using the Identified Cost method. However, it's a little more difficult if the FIFO assumption is being applied.

The inventory card in Figure 8.10 includes a credit sale of six office chairs on 4 September. Invoice 23 shows the selling price as \$65 per chair. The FIFO assumption has been applied in the inventory card and has determined that four chairs had a cost price of \$30 each and two had a cost price of \$32 each.

Figure 8.10 Inventory card showing a credit sale

Inventory item: Office chairs		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Sep	Balance							4	30	120
								10	32	320
4 Sep	Invoice 23				4	30	120			
					2	32	64	8	32	256

The problem arises when some, but not all, of these chairs are returned. For example, on 5 September one chair is returned and the customer receives a full credit. Credit note 5 shows that the credit allowed to the accounts receivable is the selling price of \$65. The problem is in relation to the cost price and how to adjust the inventory card in Figure 8.10.

The correct approach is simply to reverse the FIFO approach in the inventory card; that is, start at the last inventory issued and work backwards through the inventory card. So, if one chair was returned, the entry would be as shown in Figure 8.11.

Figure 8.11 Inventory card showing a sales return

Inventory item: Office chairs		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Sep	Balance							4	30	120
								10	32	320
4 Sep	Invoice 23				4	30	120			
					2	32	64	8	32	256
5 Sep	Credit note 5	1	32	32				9	32	288

As goods are coming back into the business, the required entry is made in the In column. The cost price chosen was the last one issued in the Out column on 4 September (\$32). This returns the last unit issued into the inventory card, with the balance returning to nine units on hand valued at \$32 each.

If two chairs were returned on 5 September, rather than just one, use the same approach: simply rebuild the inventory card as if the goods had never been sold. The business would again have the 10 units on hand at \$32 each, as shown in Figure 8.12.

Figure 8.12 Inventory card showing a sales return

Inventory item: Office chairs		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Sep	Balance							4	30	120
								10	32	320
4 Sep	Invoice 23				4	30	120			
					2	32	64	8	32	256
5 Sep	Credit note 5	2	32	64				10	32	320

Finally, if this business accepted a return of three chairs on 5 September, note that the third chair is *not* recorded at \$32.

The balance of the inventory card on 1 September showed that four chairs cost \$30 each and 10 units cost \$32 each. If multiple units are returned, resurrect the balance of the inventory card but don't create more units than the inventory card showed on a previous date. Once the 10 units worth \$32 have been returned, the assumption is that the other goods returned must be from the \$30 inventory. Therefore, if three chairs were returned, adjust the inventory card as shown in Figure 8.13.

Figure 8.13 Inventory card showing a sales return

Inventory item: Office chairs		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Sep	Balance							4	30	120
								10	32	320
4 Sep	Invoice 23				4	30	120			
					2	32	64	8	32	256
5 Sep	Credit note 5	1	30	30				1	30	30
		2	32	64				10	32	320

If a sales return involves multiple cost prices, always return the cost prices to the inventory card in their original order. Figure 8.13 shows that the business now has one chair with a cost price of \$30, while the others all have a cost of \$32. When the next sale is made, and FIFO is applied, the first cost price to be used again is \$30.

The main difference between a sales return and a purchases return lies in how to apply the FIFO assumption. If a purchase is returned, the supplier determines the credit allowed. This is because the supplier also decided what price to charge when it issued the invoice. However, when a sale is made and FIFO is applied, a business doesn't really know the actual cost price of the item being sold. As FIFO involves an assumption about cost prices, when a sale is returned the cost price entry in an inventory card is also an assumption.

When a sale is made, FIFO assumes that the first goods bought are the first goods sold. When a sales return occurs, work backwards through the FIFO assumption and resurrect the inventory card as if the sale never took place, to ensure that FIFO is applied properly at all times.



8.5 From inventory cards to the general journal

Under the FIFO system, the cost prices of all sales are determined within the inventory cards. This amount is then recorded in the general journal when a sale is made. When the cost price is recorded in the journal, the Inventory account will decrease with the usual cost of sales entry.

The following extended example, using the inventory card for a bluetooth speaker shown in Figure 8.14, demonstrates this flow of information.



Figure 8.14 Inventory card data for bluetooth speaker

Inventory item: Bluetooth speaker		Product code: DBS1320			Valuation method: FIFO					
Supplier: Modern Electronics		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Jun	Balance							10	125	1 250
4 Jun	Receipt 121				2	125	250	8	125	1 000
8 Jun	Invoice 646	10	130	1 300				8	125	1 000
								10	130	1 300
11 Jun	Receipt 122				1	125	125	7	125	875
								10	130	1 300
15 Jun	Invoice 828				5	125	625	2	125	250
								10	130	1 300
18 Jun	Credit note 17	1	125	125				3	125	375
								10	130	1 300
19 Jun	Credit note 22				1	125	125	2	125	250
								10	130	1 300
25 Jun	Invoice 830				2	125	250			
					2	130	260	8	130	1 040
30 Jun	Memo 71				1	130	130	7	130	910
30 Jun	Memo 72				2	130	260	5	130	650

The entries in this inventory card create the following general journal entries in June:

- purchases of inventory on 8 June
- credit sales of inventory on 15 June and 25 June
- cash sales of inventory on 4 June and 11 June
- sales return of one unit on 18 June
- purchases return of one unit on 19 June
- drawings of inventory on 30 June
- inventory loss of two units on 30 June.

Note the connection between the inventory card and the general journal. The entries in the In column on 8 June are noted with an invoice number. This number indicates that the goods were purchased on credit. The credit sales made during the month are on 15 and 25 June, and these entries appear in the Out column. According to the inventory card, on 15 June there were five units sold at a cost of \$125 each. The entry made in the journal for this transaction would show a cost price entry of \$625 ($5 \times \$125$).

We can see that this business also sells its inventory for cash. In June there were two cash sales, as noted in the Out column. The cost prices of these sales can be traced back to the inventory card for the bluetooth speaker. For the entry on 11 June, the firm has applied FIFO; one unit was sold and was allocated the cost of \$125.

There are two entries towards the end of the month, evidenced by memo numbers 71 and 72. Memos may be used to record drawings of inventory, inventory used for advertising purposes, and inventory losses and gains. In this example, the owner withdrew one unit for personal use (Memo 71) and then recorded an inventory loss of two units at the end of the month (Memo 72).

A physical stocktake, done at the end of the month, revealed only five units on hand. As the inventory card indicated that seven units should be in inventory, two were found to be missing. The inventory card was then adjusted to equal the actual amount on hand.

The final process is the posting of the journal to the general ledger accounts of the business. As the general journal entries have been covered in detail already, only the inventory account is presented here.

INVENTORY					
		\$			\$
1 Jun	Balance	1 250	4 Jun	Cost of sales	250
8 Jun	Accounts payable	1 300	11 Jun	Cost of sales	125
18 Jun	Cost of sales	125	15 Jun	Cost of sales	625
			19 Jun	Accounts payable	125
			25 Jun	Cost of sales	510
			30 Jun	Drawings	130
			30 Jun	Inventory loss	260
			30 Jun	Balance	650
		2 675			2 675
1 Jul	Balance	650			

This ledger account completes the picture regarding the cost prices of inventory sold.

- The FIFO assumption is used within inventory cards to determine the cost prices at the time of sale.
- These cost prices are recorded in the general journal, along with their selling prices.
- These selling prices are verified with the source documents used: invoices, receipts or EFT documents.
- After the general journal entries are prepared, they can be posted to the general ledger accounts.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [8.1]** When unsatisfactory goods are returned, a business may issue a credit note. This is a source document that records the financial data regarding the return.
- [8.2]** A purchases return is the return of goods by a business to its supplier (accounts payable). The return must be recorded in the general journal as a debit to Accounts Payable and a reduction to the Inventory account.
- [8.3]** A sales return is the return of goods by a customer (accounts receivable) to a business. Again, this requires two entries in the general journal – a reduction to Accounts Receivable and an increase in the Sales Return account. A second entry decreases Cost of Sales and increases the Inventory account.
- [8.4]** Returns must also be recorded in a firm's inventory cards. Returns of inventory to a supplier decrease inventory on hand, while sales returns increase inventory on hand.
- [8.5]** Sales returns reflect FIFO assumptions, if the firm uses that system. However, purchases returns don't reflect FIFO assumptions, as the supplier determines what credit is returned.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Returns to a supplier

The owner of Fidget Factory was issued with the following document.


Wholesale Toy Company
 199 Barbie Road, Kensville 5025

CREDIT Fidget Factory
 898 Nepean Highway
 Elsternwick VIC 3185

NO. 3389
DATE 28/6/28
REASON Incorrect colour

DESCRIPTION	QUANTITY	UNIT PRICE	SUBTOTAL	GST	TOTAL
Fidget spinners	10	\$12.00	\$120.00	\$12.00	\$132.00
Totals			\$120.00	\$12.00	\$132.00

Total (excluding GST)

\$120.00

Total GST payable

\$12.00

Total amount payable (including GST)

\$132.00

- State the name of the above document.
- State the name of the business that issued this document.
- Explain the effect of the above document on the accounting equation of Fidget Factory.

2 Returns by a customer

The following document was held by Helen Betson, the owner of Betson's Wholesale Books, who applies a mark-up of 100% to all inventory sold.


Betson's Wholesale Books
 385 Williams Drive,
 Docklands VIC 3008

Credit The Corner Bookstore
 12 Elizabeth Street
 Melbourne VIC 3000

No. 16
Date 4/7/28
Reason Damaged

Description	Quantity	Unit price	Subtotal	GST	Total
Guinness Book of Records 2028 edition	6	\$75.00	\$450.00	\$45.00	\$495.00
Totals			\$450.00	\$45.00	\$495.00

Total (excluding GST)

\$450.00

Total GST payable

\$45.00

Total amount payable (including GST)

\$495.00



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- a State the name of the above document.
- b State the name of the business that issued this document.
- c Describe the transaction evidenced by this document.
- d State the double entry that should be recorded in the general ledger of Betson's Wholesale Books after this document is issued.
- e State the double entry that would be recorded in the books of The Corner Bookstore as a result of the above document.



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3 Returns to a supplier

On 1 July 2028, Azzopardi's Auto Spares purchased inventory from Chrysler Australia on credit for \$2000, plus GST of \$200. Some of the goods were the wrong specification and Azzopardi returned them to Chrysler on 3 July 2028. Credit note no. 65 was sent to his business. These goods originally cost Azzopardi \$150, plus GST of \$15. He intended to sell these items for \$290, plus GST of \$29.

- a Prepare the general journal entry to record the return of goods by Azzopardi on 3 July 2028.
- b Prepare the general ledger account for Chrysler Australia showing all entries for July, assuming there are no further transactions for the month.
- c State the balance owing to Chrysler Australia as at 31 July 2028.



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4 Returns by a customer

Glynn's Glassware sold goods on credit to A Zaita CPA for \$600, plus GST of \$60, on 12 July 2028. On 13 July, Zaita complained to Glynn that three items have marks on them and requested a credit. Glynn issued Credit note 241 to Zaita, approving a credit of \$150, along with a credit for GST of \$15. The cost price of the goods returned was \$65.

- a Prepare the general journal entry to record the details required as a result of Credit note 241.
- b Prepare the Accounts Receivable account for A Zaita CPA in the general ledger of Glynn's Glassware.



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5 Accounts payable

The following events were reported by the management of Peninsula Auto Parts during July 2028.

Jul 15	Spare parts were bought from Auto Spares on credit for \$480, plus GST of \$48 (Invoice 2175)
28	Faulty parts costing \$80, plus GST of \$8, were returned to Auto Spares (Credit note 127)
30	Statement of account received from Auto Spares with a balance of \$440
31	Made a payment via EFT to Auto Spares in full settlement of the account

- a Prepare the general journal entries for any of the relevant items from the above list.
- b Prepare the Accounts Payable account for Auto Spares, showing all transactions during July.

6 Accounts receivable

The following transactions took place between Encore Music Store and one of its credit customers, Jack Stewart.

Jul	3	Credit sale of musical instruments \$4200, plus GST of \$420 (cost price \$2150) (Invoice 423)
	6	One guitar was returned as it was damaged (selling price \$1200, GST \$120, cost price \$500) (Credit note 92)
	9	Credit sale of musical equipment \$2700, plus GST of \$270 (cost price \$1230) (Invoice 434)
	25	Stewart made a payment on his account of \$2000 and was granted a discount of \$40 (EFT)

- Using a general journal, prepare the entries required for the four transactions shown above.
- Prepare the Accounts Receivable – Jack Stewart account, showing all entries for the month of July 2028.

7 Accounts payable

The following details were provided by the owner of Hawthorn Sunglasses Store:

- balance of inventory as at 1 August 2028: \$49 900
- balance of accounts payable as at 1 August 2028: \$7300
- credit purchases for August: \$8400, plus GST of \$840
- cash sales for August: selling price \$19 800, plus GST of \$1980; cost price \$9500
- on 31 August, damaged goods costing \$650 were returned to a supplier (GST on returned goods \$65) (Credit note 128).

- Prepare the general journal entry to record the last item from the list above.
- Prepare the Inventory account and the Accounts Payable account, showing all transactions for August 2028.
- Apart from goods being damaged, state two other reasons why a firm might return goods to a supplier.

8 Accounts receivable

A business had inventory on hand of \$75 000 on 1 September 2028. The balance of accounts receivable as at 1 September 2028 was \$4000. The following events took place during September:

Sep	4	Sold goods on credit for \$500, plus GST of \$50 (cost price \$240)
	6	Accounts receivable returned goods that were sold for \$50, plus GST of \$5 (cost price \$20), and was granted a full credit (Credit note 9)
	12	Sold goods on credit for \$400, plus GST of \$40 (cost price \$200)
	13	Customer was issued a credit note for goods returned: selling price \$30, GST \$3, cost price \$15 (Credit note 12)
	22	An EFT payment of \$560 was received from accounts receivable in full settlement of a debt of \$575

- Prepare the general journal entries required on 6 and 13 September.
- Prepare the following general ledger accounts for September 2028: Inventory, Cost of Sales, Accounts Receivable, Sales and Sales Returns. Assume that the transactions listed above were the only events for the month of September.



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9 Accounts payable and accounts receivable

The management of Fitzroy Furniture provided the following information:

- balances as at 1 October 2028:

Inventory	\$41 200
Accounts receivable	\$8 400
Accounts payable	\$7 300
GST clearing	\$1 200 Cr

- credit purchases during October: \$7200, plus GST of \$720
- cash purchases during October: \$2100, plus GST of \$210
- cash sales for October: selling price \$12 400, GST \$1240, cost price \$6600
- credit sales for October: selling price \$5460, GST \$546, cost price \$2560
- during October, damaged goods costing \$890, plus GST of \$89, were returned to a supplier (Credit note 104)
- during October, accounts receivable returned unsatisfactory goods that were originally sold for \$680, plus GST of \$68 (cost price \$330) (Credit note 87).

- Prepare the general journal entry to record the last two items from the list above.
- Prepare the following general ledger accounts: Inventory, Cost of Sales, Accounts Payable, Accounts Receivable, Sales, Sales Returns and GST Clearing. Show all transactions for October 2028 and balance all accounts as at 31 October.



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10 Purchases returns

The owner of Retro Game Gear receives a delivery from 8-Bit Incorporated and notices that two of the game controllers delivered have scratches on them. The invoice that came with the goods on 12 August 2028 contains the following details:

Invoice 612	10 units – retro Nentindo controller @ \$40.00
	Plus GST 10% @ \$4.00

8-Bit Incorporated agreed to a full credit and issued Credit note 33 on 13 August for two controllers. On 11 August 2028, the owner already has four of these controllers in inventory, at a cost price of \$38 per unit.

- Prepare the general journal entry to record the return of goods on 13 August 2028.
- In the inventory card for the retro Nentindo controller, prepare all relevant entries for August, including the opening balance, the purchase and the return of two units to the supplier.



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11 Purchases returns

Hurstbridge Hardware maintains an inventory card for every product sold by the business. The following extract comes from one of its inventory cards.

Inventory item: Proline drills		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Jul	Balance							4	48	192
3 Jul	Invoice 731	10	50	500				4	48	192
								10	50	500





On 5 July, the owner of the business found that three of the drills delivered on 3 July weren't Proline drills and were in fact an inferior brand. The supplier, Wholesale Tools, explains that it ran out of Proline drills and substituted an alternative product. Steve Holding, the owner of Hurstbridge Hardware, isn't happy with this decision and requested a full credit for these three items. The supplier agreed to this, and on 6 July it issued Credit note B72 for the three drills.

- a Prepare the general journal entry to record the purchases return on 6 July.
- b Enter the details of Credit note no. B72 in the inventory card for the Proline drills.
- c Prepare the Accounts Payable account for Wholesale Tools, showing both the purchase and purchases returns entries.

Hint

Don't forget the 10% GST cost.

12 Sales returns

The owner of Seddon Streetwear uses coloured tags to identify his different batches of inventory. When he experiences a price rise, he simply uses a different colour from the previous purchases of his inventory items. This system allows him to identify easily the actual cost of inventory. The following transactions took place during June 2028 in relation to one product, a black leather jacket.

Jun 1	Inventory on hand: green tags: 10 jackets @ \$150 each yellow tags: 10 jackets @ \$160 each
4	Sold 5 jackets for \$325 each (3 green tags, 2 yellow tags) (Receipt 176)
11	Sold 2 jackets for \$325 each (both with yellow tags) (Invoice 978)
18	Purchased 10 new jackets for \$165 each (blue tags applied) (Invoice 7161)
20	One jacket sold on 11 June was returned to the store and full credit was granted (Credit note 16)
30	Physical stocktake (Memo 26): green tags: 6 jackets yellow tags: 7 jackets blue tags: 9 jackets

- a Prepare the inventory card for black leather jackets for the month of June using the Identified Cost method.
- b The owner is considering changing to the FIFO method but has been advised that it's not as accurate as Identified Cost. Do you agree? Explain your answer fully.

13 Sales returns

Luke Garagozlo operates a small retail business selling laptop computers. Prices in this industry can change very quickly, so Luke uses a system of coloured stickers on the laptops to help him identify their actual cost price. The following transactions relate to the Superfast laptop.

Aug 1	Inventory on hand: blue stickers: 5 laptops @ \$850 each red stickers: 8 laptops @ \$820 each
4	Cash sale of 3 laptops (red stickers) for \$1550 each (Receipt 342)
12	Purchased 5 Superfast laptops (purple stickers) for \$840 each (Invoice 7172)
15	Cash sale of 2 laptops (blue stickers) for \$1525 each (Receipt 362)
18	Cash sale of 3 laptops (1 blue, 2 purple) for \$1500 each (Invoice 650)
19	One laptop sold on 18 Aug (blue sticker) was returned and full credit allowed (Credit note 27)
22	Purchased 5 Superfast laptops (purple stickers) for \$840 each (Invoice 7182)
27	Sold on credit 8 laptops (5 purple and 3 blue stickers) to Essendon FC for \$1450 each (Invoice 657)
31	Physical stocktake (Memo 81): red stickers on hand: 3 purple stickers on hand: 3



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- a** Prepare the inventory card for the Superfast laptop for the month of August using the Identified Cost method.
- b** Redraft your inventory card prepared in part **a**, using the FIFO method of inventory valuation.
- c** Compare the cost of sales figures for the two methods of inventory valuation. Which method determines the most accurate cost of sales value? Explain your answer fully.
- d** Outline two reasons why some small business owners use the FIFO method of inventory valuation, rather than the Identified Cost method.



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14 Purchases returns

The following details relate to the Kandy Bar Stool, a product sold by Frankston Furniture.

Balance	1 July	3 @ \$28 20 @ \$27
Sales during July	5 July	10 @ \$50, plus GST of \$5 (Receipt 181)
	14 July	8 @ \$50, plus GST of \$5 (Receipt 185)
	25 July	10 @ \$52, plus GST of \$5.20 (Receipt 192)
Purchases during July	17 July	20 @ \$30, plus GST of \$3 (Invoice 711)
Purchases returns	19 July	3 @ \$30, plus GST of \$3, goods returned from the purchases made on 17 July (Credit note 88).
Physical stocktake	31 July	11 units on hand (Memo 312)

- a** Prepare all entries in the inventory card for the Kandy Bar Stool for July, using the FIFO assumption of inventory flow.
- b** Prepare general journal entries for the events that took place on 19 and 31 July.
- c** Complete the Accounts Payable account for Funky Furniture, the supplier of the Kandy Bar Stool, given that Frankston Furniture owed this supplier \$400 on 1 July. Balance the account at the end of the month.
- d** Explain the role of the FIFO assumption in relation to determining the cost price of purchases returns.



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15 Sales returns: FIFO

Consider the following inventory card produced by Harry Morris, the owner of Harry's Hardware.

Inventory item: Nail gun		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Sep	Balance							5	38	190
								15	40	600
5 Sep	Invoice 73				5	38	190			
					2	40	80	13	40	520

I Whinge purchased the seven items shown on credit on 5 September but isn't satisfied with one of them and has been approved for a credit of \$70, plus GST of \$7 (Credit note 55, issued 6 September).





- a** Prepare the general journal entry for the sales return on 6 September.
- b** Justify the dollar values used in your answer to part **a** and explain the source of each of them.
- c** Redraft your journal entry for 6 September if I Whinge returned:
 - i** two items, rather than one
 - ii** three items, rather than one.
- d** Complete the entry in the inventory card for a sales return by I Whinge of three items on 6 September.

16 Sales returns: FIFO

The manager of Bundoora Beard Oils, Jack Elasmarr, applies the FIFO assumption and provides the following information in relation to one of his inventory items.

Balance as at 15 July	5 @ \$6 25 @ \$7
Credit sale on 16 July (Invoice 54)	8 units @ \$15, plus GST
Sales return on 17 July (Credit note 19)	2 units: credit allowed \$30, plus GST

- a** Prepare entries in the inventory card, showing the balance on 15 July, the sale on 16 July and the return on 17 July.
- b** Justify the cost price you have applied to the return on 17 July.
- c** Using the general journal, prepare the entry required on 17 July.

17 Sales returns: FIFO

Ian White is the owner of White Water Canoes. He uses the perpetual inventory system and maintains inventory cards under the FIFO method of cost allocation. The following information comes from one of these inventory cards.

Inventory item: Glide paddle		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Aug	Balance							2	75	150
3 Aug	Invoice 329	8	78	624				2	75	150
								8	78	624
4 Aug	Invoice A92				2	75	150			
					1	78	78	7	78	546

On 6 August T Lockery returned one of the Glide paddles sold on 4 August. The paddle had a large dent at one end. Lockery requested that her account be credited for the returned item. White agreed to this, and on 6 August issued Credit note 812 for \$150, plus GST of \$15.

- a** Prepare the general journal entry to record the sales return on 6 August.
- b** Enter the details of the sales return in the inventory card for the Glide paddle.
- c** Prepare the Accounts Receivables ledger account for T Lockery, showing both the sales and sales returns entries. (*Note:* All three paddles were sold for \$150, plus GST of \$15.) Balance the account as at 6 August.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

State two reasons why goods may be returned to a supplier.

Question 2 (3 marks)

A business purchased 20 items costing \$10 each (plus GST) on 1 May 2028. Two of the items were returned to the supplier on 2 May and Credit note 34 was issued for a full credit for the two items. **Prepare** the general journal entry, including a narration, to record the return on 2 May 2028.

Question 3 (5 marks)

The following inventory card has been provided by the owner of Luxury Leathergoods, a business that sells all its inventory with a 100% mark-up.

Inventory item: Deluxe suitcase		Valuation method: FIFO								
		IN			OUT			Balance		
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
1 Apr	Balance							2	200	400
8 Apr	Invoice 32	6	250	1 500				2	200	400
								6	250	1 500
11 Apr	Invoice 343				2	200	400			
					1	250	250	5	250	1 250

On 12 April, the customer returned one of the suitcases sold on 11 April and was granted a full credit. Credit note 65 was provided on this date.

- Update** the inventory card for the Deluxe suitcase on 12 April. (2 marks)
- Prepare** the general journal entry required on 12 April (narration not required). (3 marks)



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

Inventory valuation

KEY TERMS

Product cost

Period cost

Net realisable value (NRV)

Inventory write-down

A firm's accounting system needs to keep track of the value of all the items in its inventory. In this chapter, you will learn how to determine inventory value in line with the qualitative characteristics of accounting, and how to record and adjust inventory value in the double entry system.

Learning objectives

By the end of this chapter, you will be able to:

- **distinguish** between a 'product cost' and a 'period cost' [9.1]
- **apply** the qualitative characteristic of *relevance* when determining product costs [9.1]
- **explain** the effect on profit of treating an expense as a product cost rather than a period cost [9.1]
- **explain** the meaning of the term 'net realisable value (NRV)' [9.2]
- **value** inventory at the lower of cost and NRV [9.2]
- **record** an inventory write-down in the general journal and in inventory cards [9.3]
- **explain** the effect of an inventory write-down on an income statement [9.3]
- **explain** the two-fold effect of an inventory write-down on a balance sheet [9.3]

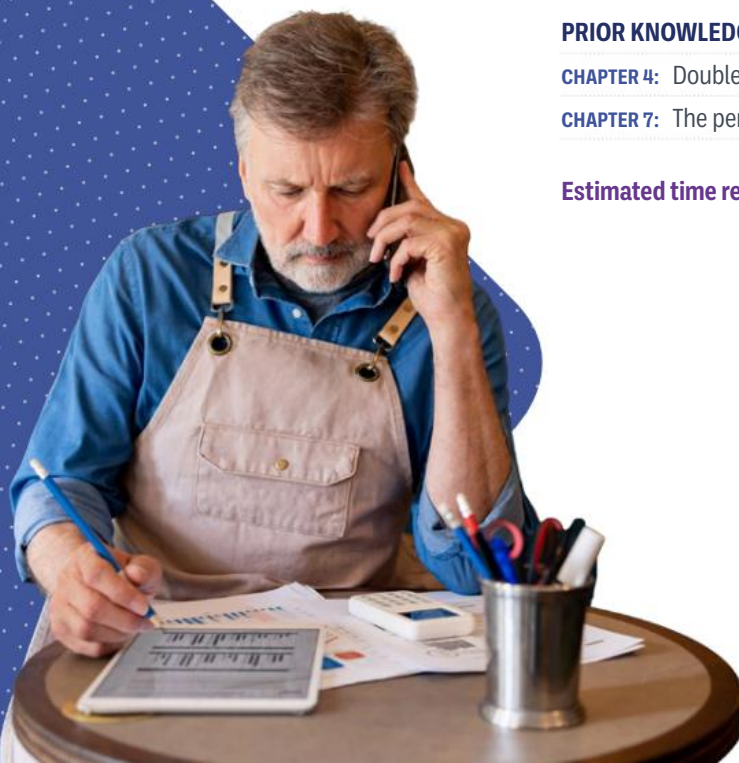
PRIOR KNOWLEDGE

CHAPTER 4: Double entry recording: An introduction

CHAPTER 7: The perpetual inventory system



Estimated time required: 1 week





9.1 Product costs and period costs

The term ‘cost of inventory’ means the cost to purchase an item, plus any other costs directly related to that item. The purchase price is normally stated on a purchase invoice. The other costs may include customs duty or cartage (shipping fees) if they can be allocated in a logical way to a particular item of inventory.

For example, if five items of inventory are purchased and the cartage paid was \$15, the cartage per unit is \$3 and this amount can be charged to each individual item as a **product cost**. This cost becomes part of the item’s overall cost and is recorded on its inventory card.

However, it’s not possible to isolate the cartage per item when a delivery of inventory involves several different items – for example, when a delivery for a sports store includes 20 footballs, 30 football jumpers, 12 soccer balls and 3 trampolines, with a cartage fee of \$55 for the entire delivery. In these sorts of cases, the cartage is treated as a **period cost**, not a product cost. This means it is written off as an expense for the reporting period and isn’t recorded as part of the cost of a particular inventory item. Period costs are *not* recorded on the inventory cards. Instead, a separate ledger account should be created for the expense incurred.

product cost a cost added to the cost price of a unit of inventory

period cost a cost written off as an expense for the reporting period

Cartage (shipping fees) can be recorded as either a product cost or a period cost.



The ‘relevance’ test

When considering the cost of an item of inventory, you will need to ask whether a cost is relevant, based on its significance. Relevant accounting information affects decision-making. The ‘relevance’ test doesn’t consider the nature of the item, but only the dollar value paid and its relative importance.

Let’s look at two examples to illustrate this test.

EXAMPLE 9.1

Perfect Props purchases one replica shield at a cost of \$300, plus a delivery fee of \$10. How should the \$10 be treated – as part of the cost of the item or as a separate expense?

The answer lies in the interpretation of relevance and the dollar value.

- If the \$10 is viewed as a relevant amount, it should be added to the cost of the item of inventory. The item would be entered on the inventory card at a cost price of \$310 (\$300 + \$10 delivery).
- If the \$10 isn’t seen as relevant to decision-making, it wouldn’t be added to the cost price. The delivery fee would be treated as a period cost in the usual fashion (probably as ‘cartage inwards’).

Most small businesses would treat \$10 cartage as a product cost. It’s a significant dollar amount on a per-item basis, and it would impact on the decision about the selling price of the shield. Also, it’s easily identifiable on a per-unit basis, so it’s more likely to be treated as a product cost.

This decision is a matter of opinion, and some businesses may choose differently. However, if a cost can be traced to an individual unit in a logical way, and if it’s a reasonably significant dollar value, it should be treated as part of the cost of the item.

EXAMPLE 9.2

Perfect Props also purchases 10 replica World War Two helmets with a cost price of \$75, plus a delivery fee of \$10. How should the \$10 be treated in this situation?

The \$10 can be easily and logically allocated as \$1 per helmet, on top of each item's cost price of \$75. But is a cost of \$1 significant in this case? If the owners of Perfect Props think the \$1 cost isn't significant, they wouldn't add it to the item's inventory card. Instead, they would treat \$10 as a period cost and debit it to the Cartage Inwards account, which would be closed off to the Profit and Loss Summary account at the end of the period.

Again, this decision is a matter of opinion. Some business owners may feel that a \$1 delivery cost per item would affect their decision-making when pricing the goods, and that they should therefore treat it as a product cost. Others might argue that it's not significant and can simply be written off as a period cost.

There is no definite percentage or dollar amount that determines whether an item should be treated as a product cost or a period cost. The two tests that need to be satisfied are:

- Can the cost be *logically* traced to an individual inventory item?
- Is the amount per item *significant* enough to affect decision-making?

Relevance and decision-making

One of the basic roles of accounting is to provide financial information for decision-making. The purpose of the characteristic of *relevance* is to ensure that all significant, material information is available so that decision-makers are fully informed.

An item may not be considered relevant if it has a small, insignificant value. As items grow in value, they become more likely to be relevant to decision-making. The question is: what dollar value does an item need to be before it's relevant to decision-makers?

If you are unsure whether an item's omission would affect decision-making, it's safer to classify the item as relevant and to let those making the decisions have the final verdict. As a general rule, when dealing with the cost of an item of inventory, exclude only very small, insignificant amounts from the definition of the cost of a particular item.

The effect on profit

The decision as to whether to treat an item as a product cost or a period cost may affect the profit result for a particular period. For example, when cartage inwards is treated as a product cost, it becomes part of the cost of the inventory item and is treated as part of the current asset called inventory. It's not written off as an expense until this inventory is actually sold. Therefore, product costs become part of the cost of sales expense when inventory is actually sold.

However, if cartage is treated as a period cost, the amount paid is written off as an expense for the *current* period, even if some units of inventory aren't actually sold. The decision to treat an item as a product cost or a period cost may therefore affect the profit figure.

EXAMPLE 9.3

Jun 1	200 units are purchased at a cost of \$40 each; the delivery fee paid is \$400.
30	Of the 200 units purchased, only 30 have been sold by the end of June.



» As the delivery fee amounts to a cost of \$2 per unit, the following choices are available:

Product cost		Period cost	
Cost price	\$40	Cost price	\$40
+ delivery	\$2	Cartage in expense	\$400
Total cost	\$42		

Since only 30 units were sold by 30 June, the expenses would be reported as follows under the two alternatives:

Product cost		Period cost	
Cost of sales (30 x \$42)	\$1 260	Cost of sales (30 x \$40)	\$1 200
		Cartage in	\$400
Total expenses	\$1 260	Total expenses	\$1 600

This shows that if the cost of delivery is treated as a period cost, expenses are \$340 higher and profit is \$340 less than if it is treated as a product cost. The difference occurs because, under product costing, the delivery fee of \$2 per unit remains as part of inventory for the 170 units that haven't yet sold ($170 \times \$2 = \$340$).

Profit will always be lower if expenses are written off as period costs, unless all units of inventory are sold by the end of the period. If this occurs, profit will be exactly the same, regardless of whether an item is treated as a product cost or a period cost.

If any goods remain unsold at the end of a period, product costing will *always* result in a higher net profit, as some of the expense would still be part of inventory. However, this cost would be written off in a subsequent period when the inventory is finally sold.

EXAM-STYLE QUESTION

A business owner asked the question: 'Should delivery expenses always be treated as a product cost?'

Describe two situations where delivery expenses should *not* be treated as a product cost. (2 marks)

Sample answer

Situation 1: Cartage inwards should be treated as a period cost if the delivery costs cannot be logically allocated to individual inventory units. This may happen if the delivery involved a range of different items.

Situation 2: Delivery expenses can also be incurred when delivering goods to customers. In this case, the cost is clearly not incurred as part of the purchasing of inventory and therefore it should be treated as a period cost and be written off as cartage outwards.

Exam advice

When you are asked for two situations, or two advantages or two examples, always provide two totally different answers. In this case, knowing the difference between cartage inwards and cartage outwards provides you with two distinct responses: one relates to the possible treatment of cartage in, while the other identifies that cartage out should never be treated as a product cost.

Don't use rote learnt responses. This question clearly states two situations where delivery expenses should not be treated as product costs. Students will often misread this type of question and provide, say, one reason for treating the expense as a product cost and one reason for treating it as a period cost. Always read the question very carefully!

9.2 Cost price versus net realisable value



As a basic rule, inventory is always recorded at cost prices. This is the case for both individual inventory cards and the double entries in the general ledger accounts. However, there is an exception to this general principle when reporting inventory in the final accounting reports. In the balance sheet of a trading firm, inventory should be valued at the *lower* of two alternatives: cost price and net realisable value.

An item's **net realisable value (NRV)** is its estimated selling price less any costs incurred in its marketing, selling and distribution. In other words, it's the net amount the business expects to gain from the sale of the item.

Any costs incurred in selling must be traceable on an individual basis to the specific inventory item involved. For example, if a firm expects to sell an item for \$18 but pays a commission of \$3 for each unit sold, the item's NRV would be \$15.

net realisable value (NRV)
the estimated selling price of an item of inventory, less any costs incurred in its selling, marketing or distribution

The function of NRV

In a few cases, inventory items may have an NRV that is actually *lower* than the cost paid by the business. For example, a business may sell an item for less than it cost to purchase. This may occur because the item of inventory has been superseded by a new model, has become obsolete, is out of season or out of fashion, or is damaged or shop-soiled.

The qualitative characteristic of *faithful representation* demands that financial reports faithfully represent real economic events. Accountants must therefore recognise losses on inventory if they occurred in the current reporting period. The characteristic of *relevance* also demands that if a business decides to sell inventory for less than it cost, it should recognise the loss in the current reporting period. If it doesn't recognise the loss at this time, the profit for the period will be overstated and won't faithfully represent what has occurred.

Therefore, inventory should be valued at the lower of cost and NRV. If you expect inventory to be sold for less than your firm paid for it, use the NRV to value that line of inventory. This avoids overstating the value of inventory in the balance sheet.

When this rule is applied, accounting standards demand that both the cost of inventory and its NRV are stated on an individual product basis, rather than total inventory. Of course, in most businesses, the cost of total inventory is usually much less than its NRV, as it's normal to sell inventory at a profit.

In order to identify products where the NRV may be lower than the item's cost, the preferred method is to consider individual inventory items. However, this isn't always possible and it is acceptable, according to the accounting standards, to sometimes consider items in groups of inventory.



Applying NRV in financial reporting

The management of Essendon Trading has just completed its physical stocktake and determined inventory on hand.

Inventory is usually valued at cost price.

Inventory item	Cost	Quantity	Value
A	\$10	400	\$4 000
B	\$10	200	\$2 000
C	\$20	200	\$4 000
D	\$30	300	\$9 000
Total cost of inventory			\$19 000

The value for inventory shown above only takes into account the cost of the firm's inventory. When the NRV of each item is taken into account, a different picture emerges.

Item	Cost	NRV	Lower of cost and NRV	Quantity	Value
A	\$10	\$18	10	400	\$4 000
B	\$10	\$7	7	200	\$1 400
C	\$20	\$25	20	200	\$4 000
D	\$30	\$22	22	300	\$6 600
					\$16 000

You should always use the lower of the two values provided: cost price and the NRV of each item.

The table shows that item A cost the firm \$10 per unit and is expected to sell for \$18. The lower of these two figures is the cost of \$10, so this figure is adopted. The same situation exists for item C, which cost \$20 and is expected to sell for \$25. However, items B and D both have an NRV that is lower than their cost prices. The rule of using the lower of cost and NRV means that, for these two items, the NRV must be used.

The effect of this is that the cost of inventory was \$19 000 but, because some items won't be sold for their cost price, this value must be reduced to \$16 000. This is done via a general journal entry recording an **inventory write-down** (Figure 9.1).

inventory write-down

a general journal entry used to reduce the value of an item of inventory from its cost price

Figure 9.1 General journal entry to record an inventory write-down

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec	Inventory write-down	3 000	
	Inventory		3 000
	Adjusting entry for inventory write-down (Memo 45)		

Adjusting inventory cards for an inventory write-down

As well as the general journal entry, the adjustment for an inventory write-down also affects the item's inventory card, because its NRV is lower than its cost price. As usual, any entry in the Inventory account must also be recorded on the relevant inventory card.

Looking at inventory item B for Essendon Trading, there were 200 units on hand with a cost price of \$10. However, the NRV of item B was stated as only \$7. Therefore, an inventory write-down of \$3 must be recorded on the inventory card of item B, as shown in Figure 9.2.

Figure 9.2 Inventory card showing an inventory write-down

INVENTORY ITEM: ITEM B										
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
31 Dec	Balance							200	10	2 000
31 Dec	Memo 45				200	3	600	200	7	1 400

The other item with an NRV lower than its cost price is item D. The cost of this product was \$30, but it's expected to sell for only \$22. As there are 300 units of item D on hand, the write-down required is $300 \times \$8$ ($\$30 - \$22 = \$8$ per unit) (Figure 9.3).

Figure 9.3 Inventory card showing an inventory write-down

INVENTORY ITEM: ITEM D										
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
31 Dec	Balance							300	30	9 000
31 Dec	Memo 45				300	8	2 400	300	22	6 600

The general journal entry in Figure 9.1 recorded a total inventory write-down of \$3000. This can be reconciled with the entries in the inventory cards. Item B was written down by \$600, while item D had a write-down of \$2400, for a total adjustment of \$3000.

In the general ledger, the Inventory Write-down account is classified as an expense. It's shown in the income statement, along with any inventory losses identified by the physical stocktake. Both of these items are deducted from the gross profit to determine the adjusted gross profit for the period.

	\$	\$
Sales		100 000
Less: Cost of sales		40 000
Gross profit		60 000
Less: Inventory loss	2 000	
Inventory write-down	3 000	5 000
Adjusted gross profit		55 000

Inventory write-down must be included before the adjusted gross profit. *Don't* include it in the 'Other expenses' section of the report.

As shown, the Inventory account is written down to the lower value, based on the rule of using the lower of cost and NRV.

INVENTORY					
		\$			\$
31 Dec	Balance	19 000	31 Dec	Inventory write-down	3 000
				Balance	16 000
		19 000			19 000
1 Jan	Balance	16 000			

The balance of inventory would then be reported in the balance sheet after the adjustment has been made to the books.

**ESSENDON TRADING: BALANCE SHEET
(EXTRACT) AS AT 31 DECEMBER 2028**

Current assets	\$
Inventory	16 000

Qualitative characteristics and the NRV

Both the income statement and the balance sheet are affected by the adjustment for inventory write-downs.

- The income statement is affected by an adjustment to the gross profit for the period, which decreases the net profit for that period.
- The balance sheet is affected through the reduction in the Inventory account (matched with a reduction in owner's equity, due to a lower profit figure).

Both final reports are adjusted by applying the lower of cost and NRV rule, so it is less likely that the profit for the period, or the assets of the business at the end of the period, have been overstated. This complies with the qualitative characteristic of *faithful representation*, which is the main aim of this rule when valuing inventory.

Such details must also be disclosed under the qualitative characteristic of *relevance*. If a trading firm has inventory that will realise less than its cost, this is clearly relevant to the users of the final reports. The dollar value of such expected losses should be reported so that individual users can evaluate the extent of the problem.



9.3 Determining an item's NRV

Net realisable value is the estimated selling price of a product, less any costs incurred in marketing, selling and distributing the item. In our previous examples, the NRV was conveniently stated so that it could be compared with cost prices. This won't always be the case, and you may need to calculate an appropriate NRV.

EXAMPLE 9.4

Sunshine Products records the following inventory at the end of 2028.

Item	Quantity	Cost	Selling price	Selling cost
A	100	\$5	\$9	\$2 per unit
B	200	\$7	\$8	\$2 per unit

Item B previously sold for \$14 but has been replaced by a new model. Management has decided to cut the selling price to \$8 in order to clear all inventory held. When the selling costs are taken into account, the NRV of the inventory can be determined.

Item	Estimated selling price	Selling costs	NRV \$
A	\$9	\$2	\$9 less \$2 = \$7
B	\$8	\$2	\$8 less \$2 = \$6

Item A hasn't had its selling price reduced, and its NRV (\$7) is greater than its cost price (\$5). Therefore, it's not affected by the application of the NRV rule.

However, item B, which costs \$7 per unit, has an NRV of only \$6, even though its selling price (\$8) is slightly higher than its cost (\$7). When the anticipated selling costs are taken into account, the NRV of item B falls below cost.

This table summarises the application of the NRV rule.

Item	Estimated selling price	Selling costs	NRV	Cost price	Lower of CP and NRV	Qty	Value
A	\$9	\$2	\$7	\$5	\$5	100	\$500
B	\$8	\$2	\$6	\$7	\$6	200	\$1 200
Total value for inventory							\$1 700

An inventory write-down will be required in the general journal on balance day. The amount of the write-down is determined by the difference between the cost of item B (\$7) and the NRV of the item (\$6), multiplied by the number of units on hand (200). The write-down would be $\$1 \times 200 \text{ units} = \$200$.

The following general journal shows the entry required to record an inventory write-down, including the memo number in the narration.



Sometimes a business will sell items below their cost price.

GENERAL JOURNAL

Date	Details	Dr	Cr
31 Dec	Inventory write-down	200	
	Inventory		200

EXAM-STYLE QUESTION

On 30 June 2028, Conor Ryan, the owner of Ryan's Radios, provided the following information relating to the XY32 Digital Radio, which has just been superseded by a new, improved model. (3 marks)

Cost price	Quantity on hand	Estimated selling price	Sales commission per radio
\$75	24	\$65	\$5

- Calculate the total value of the XY32 Digital Radio by applying the lower of cost and NRV rule on 30 June 2028. (1 mark)
- Explain how the balance sheet of Ryan's Radios is affected by applying the lower of cost and NRV rule. (2 marks)

Sample answer

$$NRV = \$65 - \$5 = \$60$$

$$\text{Quantity} \quad \times 24$$

$$\text{Value} \quad \$1440$$

Value of inventory XY32 digital radios \$1440

The current asset **Inventory** would be decreased by \$360, as the difference between cost price and NRV is \$15 per unit. As there are 24 units on hand, $\$15 \times 24 = \$360$. This amount would be written off as an expense as **inventory write-down** and therefore profit would decrease by \$360, meaning that the **Owner's Equity** account would also decrease by \$360.

Exam advice

When responding to a question about the effect on an accounting report, provide full details of the effect, including the dollar amount. In this question, you would be expected to determine the difference between the cost price of the radios and the estimated NRV, and then to multiply the result by 24 units.

Don't simply state that both assets and owner's equity would decrease. This type of question requires a full explanation. If you don't provide full details, you won't receive full marks.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [9.1]** The cost of inventory includes both the purchase price of an item and any other costs directly related to that item.
- [9.1]** Product costs are related directly to an inventory item and are recorded on its inventory card. Period costs aren't related directly to an inventory item; they are written off as an expense for the current reporting period.
- [9.1]** When deciding to treat a cost as a product cost or a period cost, a business should consider whether the cost can be logically traced to an individual inventory item, and whether the amount per item is significant enough to affect decision-making. This satisfies the demands of the qualitative characteristic of *relevance*.
- [9.2]** In the balance sheet of a trading firm, inventory should be valued at the lower of cost price and net realisable value (the estimated selling price less any costs incurred). NRV will be lower than cost price in situations where goods are sold at a loss.
- [9.3]** When NRV is lower than cost price, this is recorded in the general ledger as an inventory write-down and the item's inventory card is adjusted.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Product or period cost?

During the month of July 2028, the owner of Westside Sports, Stan Poppleton, made the following purchases.

Jul 6	Bought on credit five bikes at a cost of \$240 each. The bikes were modified before delivery with a computerised speedometer/odometer. The modifications cost \$25 per bike.
14	Purchased two dozen Sherrin footballs at a cost of \$70 each. Poppleton also paid the courier's delivery fee of \$12.
22	Received a special delivery of 12 soccer balls from Good Sports. These balls usually cost \$38 but have been repackaged in special boxes featuring the flags of the nations that compete in the World Cup. This was done as a marketing strategy by Good Sports and the repackaging cost Poppleton \$4 per ball.

- For each of the three items Poppleton purchased during July, state the cost price that you recommend he should record on the item's inventory card. Justify your answer in each case.
- Explain the difference between a product cost and a period cost. Use examples from Westside Sports to clarify your answer.

2 Product or period cost?

Rosa Mondio is the owner of Phonelife, a small business that sells smartphone accessories. On 1 October 2028, she received a delivery of iPhone cases from one of her suppliers. The invoice includes the following details.

10 Perfecta iPhone cases @ \$25	\$250
Plus: cartage	30
Invoice subtotal	280
Plus: GST	28
Invoice total	\$308

On 1 November 2028, Rosa received another delivery. The invoice sent with the goods on this occasion included the following information.

10 crystal screen protectors @ \$40	\$400
10 leather tablet wallets @ \$28	280
15 Bluetooth speaker sets @ \$40	600
Plus: cartage	30
Invoice subtotal	1 310
Plus: GST	131
Invoice total	\$1 441

- At what cost should you record the iPhone cases purchased in October on the inventory card? Explain your answer fully, including your treatment of the cartage fee and the GST.
- At what cost would you record the screen protectors that were delivered in November? Justify your answer.
- Is there any difference in your treatment of the cartage in October compared to November? In your answer, refer to a qualitative characteristic of accounting.



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3 Product costing

Echuca Electrical is a retail store that sells the Deluxe 500 L (500 litre) refrigerator. The following financial details have been provided for your information.

Invoice price of the Deluxe 500 L refrigerator	\$800
Advertising	\$4800 per annum
Customs duty payable	10% of purchase price
Insurance of inventory	\$1500 per annum
Cartage in expenses	\$40 per refrigerator
Cartage out expenses	\$20 per refrigerator
Average mark-up on refrigerators	75%
Commission paid on sales	5%

- Select the relevant details and calculate the dollar amount that should be recorded as the cost of one Deluxe 500 L refrigerator.
- Explain your treatment of the items 'cartage in' and 'cartage out'.
- Explain the difference between a product cost and a period cost. Use examples from the above information in your answer.
- During August 2028, the business sold 10 Deluxe 500 L refrigerators. Prepare an income statement to show the net result of selling these 10 fridges. (Note: The 75% mark-up is applied to the total product cost of each fridge.)



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4 Product costing

Skipper's Office Supplies decides to sell a new line of inventory, the Pro-plus printer, which it will purchase in lots of 10 units at a time. As a special promotion, the owner of the business, Toni Skipper, includes an extra printer cartridge with each printer. She also has the printers repackaged, in an attempt to promote sales. All printers are delivered once a month by the supplier, the Global Printer Company. Details of the price structure for this inventory line are as follows.

Supplier's price	\$90	GST \$9
Extra cartridge	\$20	GST \$2
Packaging costs	\$10	GST \$1
Estimated selling price	\$140	GST \$14
Delivery costs per month	\$100 (covers all inventory)	GST \$10

- What cost price would you record on the inventory card for the Pro-plus printer? (Show all workings.)
- Explain your treatment of the GST payable on the inventory purchased.
- Distinguish between product costs and period costs, giving an example of each from the above information.

5 Net realisable value

The following information relates to three different inventory items in a trading business.

Item	Quantity	Cost price \$	Estimated selling price \$
101	2 000	8	12.50
102	1 000	7	11.00
103	3 000	12	10.00

- a** Determine the cost of inventory that should be determined as a result of a physical stocktake.
b Copy and complete the following table, using the lower of cost and NRV rule.

Item	Cost price \$	NRV \$	Lower of cost and NRV	Quantity	Value \$
101					
102					
103					
Total					

- c** Prepare the general journal entry to adjust the books of the business for an inventory write-down, as noted by Memo 47.
d State the value that would be reported for inventory in the balance sheet of the firm on 30 June 2028.
e Show how the inventory write-down would be recorded in the inventory card of item 103.
f Explain the effect of the inventory write-down on the income statement.

6 Net realisable value

The information listed below relates to the inventory of Better Products on 30 September 2028.

Item	Quantity	Cost price \$	Estimated selling price \$	Marketing costs per unit \$
A	800	5	9	2.00
B	600	4	4	2.00
C	1000	9	16	3.00
D	1800	8	14	2.50

- a** Calculate the value of inventory on hand at cost price.
b Determine the NRV for each line of inventory.
c Prepare a table to show the application of the lower of cost and NRV rule.
d Prepare the general journal entry to record the adjustment for an inventory write-down, evidenced by Memo 33.
e Show how the inventory write-down would be recorded in the inventory card of item B.
f Show how inventory would be reported in the balance sheet of Better Products as at 30 September 2028.



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7 Net realisable value

Joe Lanzon is the owner of Newport Kitchen Supplies, a small business that sells a variety of kitchen products, including a range of coffee percolators in different sizes. He has provided the following information as at 30 June 2028 in relation to his inventory of percolators.

Size (cups)	Quantity as per inventory card	Quantity as per stocktake	Cost price \$	Normal selling price \$	Estimated NRV \$
4	100	100	12	19	19
6	120	115	18	28	25
8	80	82	20	29	29
10	160	150	25	35	32
12	180	180	28	39	25

- Using the relevant information from the above table, calculate the value of the overall inventory loss or gain to be recognised on 30 June 2028.
- The recognition of an inventory loss or gain can be justified by referring to the qualitative characteristics of accounting. Name three of these characteristics and explain how they justify the recording of an inventory loss or gain.
- Calculate the value of the inventory write-down required on 30 June 2028.
- Explain why an inventory write-down should be recorded on balance day. Refer to the relevant accounting assumption.
- Prepare the general journal entry to record the inventory write-down required.
- Taking into account all the relevant information from above, determine the balance of inventory reported in the balance sheet for Newport Kitchen Supplies as at 30 June 2028. (Show all workings.)



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CASE STUDY

Shane Noonan is the owner of MacKillop Electricals, a retail outlet that sells a range of household appliances. Noonan closes his books annually on 31 August. The following extracts have been provided from some of the inventory cards used in his business.

Inventory item: Premier 120 cm television					Identified Cost					
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
23 Aug	Receipt 4334				2	250	500	6	250	1 500
26 Aug	Receipt 4342				1	250	250	5	250	1 250
28 Aug	Receipt 4351				2	250	500	3	250	750

Inventory item: Series X laptop					Identified Cost					
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
25 Aug	Invoice 2132				2	1 200	2 400	5	1 200	6 000
								8	1 300	10 400
27 Aug	Receipt 2136				1	1 200	1 200	4	1 200	4 800
								8	1 300	10 400
30 Aug	Receipt 2138				2	1 300	2 400	4	1 200	4 800
								6	1 300	7 800



Inventory item: Deluxe freezer					Identified Cost					
Date	Details	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
22 Aug	Receipt 4332				1	800	800	1	800	800
								3	850	2 550
26 Aug	Receipt 4344				2	850	1 700	1	800	800
								1	850	850
30 Aug	Invoice 32193	6	850	5 100				1	800	800
								7	850	5 950

- A stocktake performed on 31 August 2028 revealed that only two Premier televisions were in inventory (Memo 21).
 - A new model of laptop computer has just hit the market. Noonan has reviewed his computer inventory and decided to sell his units of the Series X laptops for \$1100 each in a clearance sale, starting in early September 2028 (Memo 22).
 - The customer who purchased the two freezers on 26 August was charged \$1300 per unit, plus GST of \$130. Unfortunately, he has decided that he now only needs one of them. Noonan decides to give him a credit note for the full price charged for the item. This decision is made and carried out on 31 August (Credit note 112 issued to A Leishman).
- Prepare the relevant general journal entries on 31 August to account for all the above events.
 - Justify your treatment of the value of the computers. Refer to one accounting assumption and one qualitative characteristic in your answer.
 - What cost price did you use for the return of the freezer? Justify your choice.
 - State the value of inventory on hand for each of the three inventory items after the adjustments you have made via the general journal in part **a** of this question. State the quantity, value and total value on hand for each item.
 - Noonan is tired of having to write his cost prices in code on all his inventory items. He is now thinking of adopting the FIFO method of inventory valuation. Should he continue using the Identified Cost method or change to FIFO? Discuss.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

A small business owner stated, 'I don't care if you treat an expense as a product cost or a period cost. They're both expenses, so profit will still be the same.' Do you agree with this comment? Explain your answer fully.

Question 2 (4 marks)

Mark Morris, the proprietor of the Carlton Cricket Shop, has provided the following details in relation to his range of cricket bats. He has just received a delivery from his supplier. Details of the invoice are shown below.

Product description	Quantity delivered	Cost price per bat	Estimated selling price	GST charged	Total charged
T20 Special	20	\$180	\$440	\$18	\$3 960
One Day Master	15	\$240	\$520	\$24	\$3 960
Test Match Deluxe	10	\$290	\$590	\$29	\$3 190
Total charged					\$11 110

- Before selling his bats, Morris applies a set of advertising stickers to each bat. The stickers cost him an additional \$10 per bat.
- Cartage inwards was charged on the above delivery. The invoice for the delivery stated the cartage fee as \$150, plus GST.



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- » a **Calculate** the cost of the Test Match Deluxe cricket bat to be recorded on the inventory card used by the Carlton Cricket Shop. (2 marks)
- b **Explain** your treatment of the cartage inwards expense of \$150. (2 marks)

Question 3 (2 marks)

Explain the circumstances that should exist to justify the valuation of inventory being based on net realisable value.

Question 4 (4 marks)

The owner of City Cycles, Michael Archer, has provided the following information in relation to the E50 electric bike, which usually sells for \$950. The bikes have a cost price of \$550, including GST. However, due to the introduction of the E60 electric bike into the market, Archer expects sales of the E50 model to drop dramatically. He has therefore decided to offer the E50 bikes at a price of \$520, which includes a bike helmet and a puncture repair kit. The helmets cost Archer \$25 each and the repair kits \$15 each. On 30 June 2028, the inventory card for the E50 bikes shows 27 units on hand.

- a **Calculate** the net realisable value of the bikes on hand on 30 June 2028. (2 marks)
- b **Prepare** the general journal entry required on 30 June 2028 showing the valuation of the E50 electric bike. (Narration is not required.) (2 marks)

Question 5: Modelling question (14 marks)

Michelle Faulkner, the owner of Shepparton Hardware, isn't sure about the different effects of treating an expense as a product cost or a period cost. On 1 June 2028, she received a delivery of wheelbarrows from Hardware Wholesalers. The invoice from the supplier included the following charges:

- 50 wheelbarrows @ \$150 each
- GST charged on 50 wheelbarrows, \$15 each
- delivery fee, \$250
- GST on delivery fee, \$25.

Faulkner thought that if she had the wheelbarrows painted in 'football colours', she may be able to sell more during the football season. A friend has agreed to paint the wheelbarrows in various team colours at a cost of \$35 per item.

In order to make a reasonable profit on each wheelbarrow, Faulkner has decided to sell them for \$385 each, including GST. On 30 June 2028, she completed a stocktake and found that she still had in inventory 30 of the wheelbarrows purchased on 1 June.

- a **Calculate** the cost of the wheelbarrows to be recorded on the inventory card for Shepparton Hardware. (2 marks)
- b **Justify** your treatment of the \$35 paid for the painting of each wheelbarrow. (2 marks)
- c **Prepare** an extract from an income statement to show the gross profit earned on wheelbarrows during June, assuming that the delivery fee and painting of the wheelbarrows are both treated as product costs. (3 marks)
- d **Redraft** your income statement to show the gross profit earned on wheelbarrows during June, assuming that the delivery fee and painting of the wheelbarrows are both treated as period costs. (3 marks)
- e **Compare** the results revealed by your two income statements and discuss which of the two reports provides the most accurate measurement of profit. **Justify** your answer with reference to an accounting assumption. (4 marks)



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 10

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Closing the general ledger

KEY TERMS

Profit and Loss (P&L) Summary
account
Net profit
Closing entry
Net loss

This chapter focuses on the procedures necessary at the end of a reporting period. Once you have prepared a trial balance, you must still determine the profit or loss earned by the firm during that period and prepare the ledger accounts for the new reporting period.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** what is involved in closing the general ledger [10.1]
- **prepare** a Profit and Loss Summary account in the general ledger [10.1]
- **distinguish** between closing an account and balancing an account [10.2]
- **state** which accounts are closed and which are balanced [10.2]
- **prepare** general journal entries to close the relevant accounts [10.3]
- **prepare** a general journal entry to transfer a net profit or loss to the owner's Capital account [10.4, 10.5]
- **prepare** a general journal entry to close the owner's Drawings account to the Capital account [10.5]

PRIOR KNOWLEDGE

CHAPTER 1: The role of accounting

CHAPTER 4: Double entry recording: An introduction

CHAPTER 5: The general journal and the general ledger



Estimated time required: 1 week





10.1 Closing a general ledger

New reporting periods must always begin with a zero balance.



Revenue and expense accounts *must* be closed off on balance day of every period and their balances returned to zero for the new reporting period. This exercise is commonly referred to as *closing the general ledger*, or simply *closing the ledger*. Don't mix one period's revenue and expenses with those of the following period, as this would prevent an accurate profit being determined for a given period.

Profit and Loss (P&L) Summary account a general ledger account that summarises all revenues and expenses for a reporting period in order to determine the profit or loss for that period

net profit the result when revenues exceed expenses for a reporting period

The Profit and Loss Summary account

The **Profit and Loss Summary account** (also called the P&L Summary account) is a general ledger account used to summarise the totals of all revenue and expense accounts in order to calculate a business's **net profit**. It's classified as a profit determination account, which is a temporary owner's equity account.

When accounts are closed off, their balances are transferred to the P&L Summary account. This account is only used on balance day. Figure 10.1 shows an example of a P&L Summary account.

Figure 10.1 Profit and Loss Summary account showing a net profit

PROFIT AND LOSS SUMMARY					
2028		\$	2028		\$
31 Mar	Expense accounts	55 000	31 Mar	Revenue accounts	70 000
	Capital (net profit)	15 000			
		70 000			70 000

Don't list individual accounts in the P&L Summary account.

P&L Summary accounts have three key features:

- The total of all revenue accounts appears on the credit side of the account.
- The total of all expense accounts appears on the debit side of the account.
- Profit equals revenue less expenses (in this example, \$70 000 – \$55 000), so the net profit of the firm (in this example) is \$15 000.

The calculated profit is entered in the P&L Summary account as Capital, since the profit for a period increases the owner's Capital account. The \$15 000 profit in this example is transferred to the Capital account of the owner.

10.2 Closing a ledger account



The closing of a ledger account involves making an entry in the account opposite to the balance. In a revenue account, which usually has a credit balance, the **closing entry** is made on the debit side. As expense accounts usually have debit balances, the closing entries would be made on the credit side.

closing entry a general journal entry used to close off a revenue or expense account

Consider the following accounts, which were used to determine the totals of revenues and expenses in the P&L Summary account in Figure 10.1.

CASH SALES

		\$			\$
			8 Mar	Cash at bank	60 000

CREDIT SALES

		\$			\$
			16 Mar	Accounts receivable	10 000

COST OF SALES

		\$			\$
8 Mar	Inventory	31 000			
16 Mar	Inventory	4 000			

WAGES

		\$			\$
31 Mar	Cash at bank	15 000			

ADVERTISING

		\$			\$
11 Mar	Cash at bank	5 000			

These accounts reflect transactions for the month ended 31 March 2028. We can see that the balances of the revenue accounts are \$60 000 in the Cash Sales account and \$10 000 in Credit Sales. The expenses include cost of sales of \$35 000, wages of \$15 000 and \$5000 for advertising.

When the closing entries are posted to these ledger accounts, they appear as follows.

GENERAL LEDGER

CASH SALES					
		\$			\$
31 Mar	P&L summary	60 000	8 Mar	Cash at bank	60 000

Revenue accounts have credit balances and are therefore debited with a closing entry.

As revenue accounts have credit balances, the closing entry must be on the debit side of the account.

CREDIT SALES					
		\$			\$
31 Mar	P&L summary	10 000	16 Mar	Accounts receivable	10 000

COST OF SALES					
		\$			\$
8 Mar	Inventory	31 000			
16 Mar	Inventory	4 000	31 Mar	P&L summary	35 000
		35 000			35 000

Expense accounts have debit balances and are therefore credited with a closing entry.

As expense accounts have debit balances, the closing entry must be on the credit side of the account.

WAGES

		\$			\$
31 Mar	Cash at bank	15 000	31 Mar	P&L summary	15 000

ADVERTISING

		\$			\$
11 Mar	Cash at bank	5 000	31 Mar	P&L summary	5 000

Note how the closing entries are on the opposite side to the balances of the accounts. When the closing entries are made, the account balances are brought back to zero. As with all entries in double entry accounting, every debit must be paired with a credit, and vice versa.

The other account affected in the double entry is the P&L Summary account, which gathers together all the revenue and expense account balances.

PROFIT AND LOSS SUMMARY

		\$			\$
31 Mar	Expense accounts	55 000	31 Mar	Revenue accounts	70 000
	Capital	15 000			
		70 000			70 000

The P&L Summary account must be closed once all three entries have been made. The total should be the same on both sides. It should never have a balance!

There is no need to list the individual revenue and expense items in the P&L Summary account. It's a summary of a firm's revenues and expenses for a reporting period, so only a total figure for both revenues and expenses is required.

However, it is vital to close off each individual revenue and expense account to the P&L Summary account so that, at the start of the next reporting period, all the accounts begin with a zero balance.



10.3 The general journal and closing entries

As with any entry in the general ledger, closing entries must first be recorded in the general journal. The general journal entries for the accounts discussed so far would be prepared as shown in Figure 10.2.

Figure 10.2 General journal closing entries

GENERAL JOURNAL

Date	Details	Dr	Cr
31 Mar	Cash sales	60 000	
	Credit sales	10 000	
	P&L summary		70 000
	Closing entries		
31 Mar	P&L summary	55 000	
	Cost of sales		35 000
	Wages		15 000
	Advertising		5 000
	Closing entries		

Always prepare one entry to close off all revenue accounts, and then one entry to close off all expense accounts.

As one purpose of closing entries is to reset all revenue and expense accounts to zero, every account in these categories must be named in the general journal as part of the closing process.

When the expenses of a firm are being closed to the P&L Summary account, they can be grouped into one entry. When there are multiple revenue accounts, they can also be grouped together in one general journal entry. This means there will usually be three general journal entries made to complete the closing of the ledger:

- One journal entry is used to close all revenues.
- One journal entry closes all expenses.
- The final entry closes the P&L Summary account by transferring the net profit to the Capital account.

10.4 Transfer of net profit



Once all the balances of revenues and expenses have been transferred to the P&L Summary account, the final task is to calculate the profit (or loss) earned for the period.

This final step also closes off the P&L Summary account, because the difference between revenues and expenses is the profit figure. When the profit figure is entered in the P&L Summary account, both sides of the account become equal and the P&L Summary account is closed. The profit figure is transferred to the owner's Capital account and the closing process is concluded.

Figure 10.3 shows the transfer of net profit, using the data from Figure 10.2.

Figure 10.3 General journal entry to transfer net profit

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Mar	P&L summary	15 000	
	Capital		15 000
	Transfer of net profit		

The transfer of net profit results in an increase in the owner's Capital account.

Drawings

In addition to transferring net profit to the Capital account, you must also close the drawings of the owner at the end of the period. As Drawings is a negative owner's equity account, it decreases the owner's capital.

If the owner in our example had drawings of \$10 000 for the quarter, the general journal entry required is as shown in Figure 10.4.

Figure 10.4 General journal entry to transfer drawings

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Mar	Capital	10 000	
	Drawings		10 000

The transfer of drawings results in a decrease in the owner's Capital account.

Posting journal entries shown in Figures 10.3 and 10.4 results in the following entries in the general ledger. (Note the opening balance of \$200 000 in the Capital account.)

DRAWINGS

		\$			\$
31 Mar	Cash at bank	10 000	31 Mar	Capital	10 000

CAPITAL

		\$			\$
31 Mar	Drawings	10 000	1 Mar	Balance	200 000
31 Mar	Balance	205 000	31 Mar	P&L summary	15 000
		215 000			215 000
			1 Apr	Balance	205 000

The first entry (on 1 March) represents the balance of the owner's capital at the start of the period. The result from the P&L Summary account (a profit of \$15 000) has been transferred to the Capital account and causes an increase in the owner's equity.

The drawings by the owner have the opposite effect on the Capital account. The debit to Capital reduces the owner's equity while returning the Drawings account to zero for the new period.

The firm's balance sheet on balance day summarises such information.

BALANCE SHEET (EXTRACT) AS AT 31 MARCH 2028

Owner's equity	\$	\$	\$
Capital	200 000		
Net profit	15 000	215 000	
Less: Drawings		10 000	205 000

The owner's equity of the balance sheet should be a reflection of what has happened in the capital account in the general ledger.

The need for reporting

Remember that the general ledger is a formal accounting record used by accountants. From time to time, information from ledger accounts is reported to other users, some of them non-accountants. The report extract shown repeats exactly what has been recorded in the owner's Capital account. It becomes part of an overall report that can be easily read by people who don't have a thorough accounting background. (This is in line with the *understandability* qualitative characteristics of accounting.)

While this may appear to be an unnecessary duplication of a task, it fulfils a key function of the accounting system. The system needs to present information for a variety of purposes and to a wide range of users. Accountants need to extract information from ledger accounts and use it to compile reports for others.

Report extracts may be easier for users to understand than the entire ledger.



EXAM-STYLE QUESTION

A friend of an owner has stated: 'All accounts should be closed on balance day in preparation for the next reporting period. This has to be done to comply with the going concern assumption.' Do you agree? Justify your answer.

(3 marks)

Sample answer

The going concern assumption is that the business entity will continue indefinitely into the future. Some accounts are balanced and should not be closed off on balance day. These accounts are the assets, liabilities and owner's equity accounts. The final values of these accounts are balanced and carried forward to the next period, as it's assumed the business will continue to operate. Revenue and expense accounts, however, should be closed off and returned to zero balances, ready for the new reporting period. This is also done in order to determine an accurate profit figure for the current period.

Exam advice

This type of question has appeared on many exams over the years. Students may be required to relate the closing of the general ledger accounts to the going concern, accrual basis and period assumptions. You should practise written responses for all three of these accounting assumptions.

Don't close off the Drawings account to the P&L Summary account under any circumstances! The examiners may provide you with a list of items paid during a period and this may include drawings, along with expense items for that period. This is a test of your knowledge. As Drawings is *not* an expense item, it must never be included in the closing entry for expenses.

10.5 Accounting for a net loss



The closing entries demonstrated so far have involved a business earning a profit. Unfortunately, this may not always be the case. When a business earns a **net loss**, the closing process must be adjusted to reflect this.

A loss occurs when the expenses closed off to the P&L Summary account exceed the business's revenues. This means that the debit entries to the P&L Summary exceed the credits. Therefore, a credit entry is required to close off such a P&L Summary account. The corresponding debit is made in the Capital account, reducing the owner's equity.

Figure 10.5 shows a P&L Summary account when a business incurs a loss.

net loss the result when the expenses for a period exceed the revenue for the same period

Figure 10.5 Profit and Loss Summary account showing a net loss

PROFIT AND LOSS SUMMARY					
2028		\$	2028		\$
30 Jun	Expense accounts	500 000	30 Jun	Revenue accounts	450 000
				Capital (net loss)	50 000
		500 000			500 000

As revenues were less than expenses, a net loss is the result for the period.

Figure 10.6 shows the general journal entry required to transfer a net loss to the owner's Capital account.

Figure 10.6 General journal entry showing transfer of a net loss

GENERAL JOURNAL			
Date	Details	Dr	Cr
30 Jun	Capital	50 000	
	P&L summary		50 000
	Transfer of net loss		

The journal entry to transfer a profit or a loss must transfer the final figure to the Capital account and also close off the P&L Summary account itself. The total debits made to the P&L Summary account must equal the total credit entries made.

Remember: A profit will always increase owner's equity and must be a credit to the Capital account. If a loss is made, this will decrease owner's equity and must result in a debit entry to Capital.



10.6 Closing the Sales Returns account

Another complication in the closing process is when a trading business experiences sales returns (see Chapter 8) from some of its accounts receivable. Sales Returns acts like a negative revenue account and reduces the net sales reported for a given period.

Consider the following ledger accounts. As both of these accounts are classified as revenue accounts (sales returns being negative revenue), they can both be closed off in the one closing entry (Figure 10.7).

CREDIT SALES					
		\$			\$
			1–31 Jul	Accounts receivable	11 000

SALES RETURNS					
		\$			\$
1–31 Jul	Accounts receivable	1 000			

Figure 10.7 General journal closing entry for Credit Sales and Sales Returns

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Jul	Credit sales	11 000	
	Sales returns		1 000
	P&L summary		10 000
	Closing entries		

The amount transferred to the P&L Summary account is the net sales for the period. As the business sold goods on credit for \$11 000 and had sales returns of \$1000, the net sales for the period would be \$10 000. This entry still returns the two revenue accounts back to zero balances, ready for the subsequent period.

Despite the fact that Sales Returns is netted off against the total sales made for the period, you should still report both items in the income statement for the period, as shown below.

REVENUE		
Credit sales	\$11 000	
Less: Sales returns	\$1 000	\$10 000

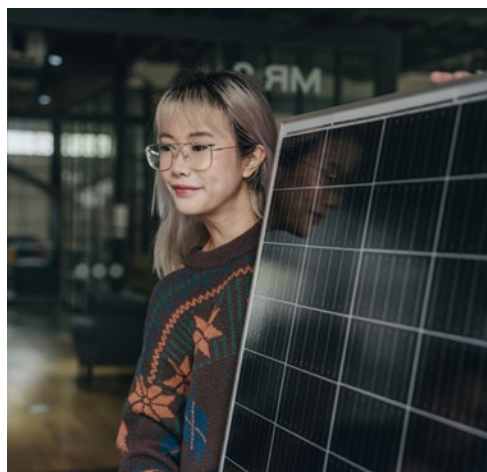
10.7 Extended example: Closing the ledger



You have examined all the steps involved in closing the ledger, but the process really starts with the preparation of the trial balance. Once a trial balance is prepared at the end of the period, and no recording errors are detected, you can begin to close the ledger.

This extended example examines the entire closing process, from the trial balance through to the transfer of net profit and drawings. It shows the closing procedures from start to finish, so that you can follow the entries from the general journal through to the general ledger.

The information in this example relates to Sustainable Sunshine, a small business that sells solar panels and related technologies and is owned and managed by Fiona Meng.



Sustainable Sunshine must close the ledger at the end of the financial year.

Trial balance

SUSTAINABLE SUNSHINE: ADJUSTED TRIAL BALANCE AS AT 30 JUNE 2028

	\$		\$
Cash at bank	8 500	GST clearing	1 000
Accounts receivable	5 000	Accounts payable	1 500
Inventory	65 000	Loan – NAB	5 000
Cost of sales	24 000	Cash sales	55 000
Inventory loss	1 000	Credit sales	17 500
Insurance	3 000	Capital	80 000
Wages	20 000		
Sales returns	2 500		
Vehicle	22 000		
Vehicle expenses	2 000		
Drawings	7 000		
	160 000		160 000

General journal

In order to prepare the entries in the general journal, it is necessary first to identify the revenue and expense accounts in the trial balance.

SUSTAINABLE SUNSHINE: GENERAL JOURNAL

Date	Details	Dr	Cr
30 Jun	Cash sales	55 000	
	Credit sales	17 500	
	Sales returns		2 500
	P&L summary		70 000
	Closing entries		
30 Jun	P&L summary	50 000	
	Cost of sales		24 000
	Inventory loss		1 000
	Insurance		3 000
	Wages		20 000
	Vehicle expenses		2 000
	Closing entries		
30 Jun	P&L summary	20 000	
	Capital		20 000
	Transfer of net profit		
30 Jun	Capital	7 000	
	Drawings		7 000
	Transfer of owner's drawings		

The net profit is calculated from the first two journal entries.

General ledger

As total revenue closed to the P&L Summary account was \$70 000 and total expenses closed off were \$50 000, the net profit must be \$20 000. These closing entries are then posted to the general ledger.

SUSTAINABLE SUNSHINE: GENERAL LEDGER

CASH AT BANK

		\$			\$
30 Jun	Balance	8 500			

ACCOUNTS RECEIVABLE

		\$			\$
30 Jun	Balance	5 000			

INVENTORY

		\$			\$
30 Jun	Balance	65 000			

COST OF SALES

		\$			\$
30 Jun	Inventory	24 000	30 Jun	P&L summary	24 000

INVENTORY LOSS

		\$			\$
30 Jun	Inventory	1 000	30 Jun	P&L summary	1 000

INSURANCE

		\$			\$
30 Jun	Cash at bank	3 000	30 Jun	P&L summary	3 000

WAGES

		\$			\$
30 Jun	Cash at bank	20 000	30 Jun	P&L summary	20 000

SALES RETURNS

		\$			\$
30 Jun	Accounts receivable	2 500	30 Jun	P&L summary	2 500

VEHICLE

		\$			\$
30 Jun	Balance	22 000			

VEHICLE EXPENSES

		\$			\$
30 Jun	Cash at bank	2 000	30 Jun	P&L summary	2 500

DRAWINGS

		\$			\$
30 Jun	Cash at bank	7 000	30 Jun	Capital	7 000

GST CLEARING

		\$			\$
			30 Jun	Balance	1 000

ACCOUNTS PAYABLE

		\$			\$
			30 Jun	Balance	1 500

LOAN - NAB

		\$			\$
			30 Jun	Balance	5 000

CASH SALES

		\$			\$
30 Jun	P&L summary	55 000	30 Jun	Cash at bank	

CREDIT SALES

		\$			\$
30 Jun	P&L summary	17 500	30 Jun	Accounts receivable	

Balance sheet

Once the closing entries are completed, the final accounting reports for the period can be prepared. The accounts used to determine profit (revenues and expenses) are reported in the income statement. The balance sheet is then prepared using the remaining accounts (assets, liabilities and owner's equity).

Chapter 11 examines the income statement in detail. At this stage, you only need to know that a balance sheet may be prepared once the P&L Summary account has been finalised.

Once the accounts for Sustainable Sunshine are completed, the balance sheet can be prepared, as shown below.

SUSTAINABLE SUNSHINE: BALANCE SHEET AS AT 30 JUNE 2028

	\$	\$		\$	\$	\$
<i>Current assets</i>			<i>Current liabilities</i>			
Cash at bank	8 500		GST clearing		1 000	
Accounts receivable	5 000		Accounts payable		1 500	
Inventory	65 000	78 500	Loan – NAB		5 000	7 500
			<i>Owner's equity</i>			
<i>Non-current assets</i>			Capital	80 000		
Vehicle		22 000	Net profit	20 000	100 000	
			Less: Drawings		7 000	93 000
		100 500				100 500





Practise and apply

10



REVISION: SUMMARY OF KEY CONTENT

- [10.1]** On balance day of a reporting period, all revenue and expense accounts are closed off and have a zero balance, so that one period's revenue and expenses aren't mixed up with those of the following period. This is called closing the general ledger, or just closing the ledger.
- [10.1]** The Profit and Loss (P&L) Summary account is a general ledger account used to gather the balances of all revenue and expense accounts so that the net profit (or loss) of a business can be calculated. When accounts are closed off on balance day, their balances are transferred to the P&L Summary account.
- [10.2]** Closing a ledger account involves making an entry in the account opposite to the balance. In a revenue account, entry is made on the debit side. In an expense account, entry is made on the credit side.
- [10.3]** Three general journal entries are made to close the ledger: one to close all revenues, one to close all expenses, and one to close the P&L Summary account by transferring the net profit to the Capital account.
- [10.4]** When the profit figure is entered in the P&L Summary account, both sides of the account become equal and the P&L Summary account is closed. The profit figure is transferred to the owner's Capital account.
- [10.4]** The drawings of the owner must also be closed at the end of the period. As Drawings is a negative owner's equity account, it decreases the owner's Capital account.
- [10.5]** A net loss occurs when the expenses closed off to the P&L Summary account exceed the revenues. This means that the debit entries to P&L Summary exceed the credits. To close off the account, a credit entry is needed, and a corresponding debit is made in the Capital account.
- [10.6]** A trading business may have sales returns, which reduce its net sales reported for a given period. They are classified as revenue accounts and are included in the same closing entry.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



Workbook
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1 Closing entries: Basic

The following information relates to Prahran Pottery Products.

GENERAL LEDGER

CASH SALES

		\$			\$
			31 Jan	Cash at bank	30 000

COST OF SALES

		\$			\$
31 Jan	Inventory	16 200			

VEHICLE EXPENSES

		\$			\$
31 Jan	Cash at bank	2 800			

CAPITAL

		\$			\$
			1 Jan	Balance	40 000

- Prepare the general journal entry to close the Cash Sales revenue account.
- Prepare the general journal entry to close the two expense accounts.
- Prepare the general journal entry to transfer the net profit (or loss) to the owner's Capital account.
- Prepare the P&L Summary and Capital accounts for the month of January 2028.



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2 Closing entries: Advanced

The following accounts are from the general ledger of Tee Total, a pop-up T-shirt shop.

CASH AT BANK

		\$			\$
1 Feb	Balance	18 000	28 Feb	Cash payments	5 455
28 Feb	Cash receipts	5 060			

INVENTORY

		\$			\$
28 Feb	Balance	10 000	28 Feb	Cost of sales	2 560

COST OF SALES

		\$			\$
28 Feb	Inventory	2 560			

CAPITAL

		\$			\$
			1 Feb	Balance	23 000





EQUIPMENT

		\$			\$
1 Feb	Balance	5 000			
28 Feb	Cash at bank	2 000			

ADVERTISING

		\$		\$	
28 Feb	Cash at bank	500			

INSURANCE

		\$		\$	
28 Feb	Cash at bank	400			

DRAWINGS

		\$			\$
28 Feb	Cash at bank	500			

WAGES

		\$			\$
28 Feb	Cash at bank	1 600			

STATIONERY

		\$			\$
28 Feb	Cash at bank	150			

CASH SALES

		\$			\$
			28 Feb	Cash at bank	4 600

CREDIT SALES

		\$			\$
			28 Feb	Accounts receivable	8 000

ACCOUNTS RECEIVABLE

		\$			\$
28 Feb	Sales/GST clearing	8 800			

GST CLEARING

		\$			\$
28 Feb	Cash at bank	305	28 Feb	Cash at bank	460
				Accounts receivable	800

- Prepare the required general journal entries to close off the relevant ledger accounts to the P&L Summary account.
- Prepare general journal entries to transfer the net profit (or loss) and drawings to the Capital account of the owner.
- Copy the revenue and expense accounts and post the closing entries to these accounts.
- Prepare the P&L Summary, Capital and Drawings accounts as they would appear in the general ledger for February 2028.
- Show how the owner's equity section of the balance sheet would be prepared as at 28 February 2028.



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3 Closing entries from trial balance data

Greg Smyth is the owner of Trailblazer Quad Bikes and has supplied the following trial balance at the end of the yearly reporting period.

TRAILBLAZER QUAD BIKES: TRIAL BALANCE AS AT 30 APRIL 2028

	\$		\$
Accounts receivable	3 200	Accounts payable	7 700
Advertising	3 500	Capital	93 350
Cash at bank	3 000	Cash sales	94 600
Cost of sales	42 500	Credit sales	14 470
Drawings	14 000	GST clearing	480
Electricity	760	Loan – GM Finance	36 000
Insurance	2 460	Mortgage loan	420 000
Interest on loan	4 700		
Office furniture	900		
Premises	500 000		
Sales returns	3 600		
Shop fittings	12 000		
Inventory	44 480		
Inventory loss	500		
Telephone expense	640		
Vehicle	12 000		
Vehicle expenses	1 360		
Wages	17 000		
	666 600		666 600

- a Prepare all relevant closing entries in the general journal, including the transfer of profit and drawings.
- b Prepare the P&L Summary and Capital general ledger accounts.
- c Prepare the owner's equity section of the balance sheet as at 30 April 2028.

4 From trial balance to balance sheet

The following information relates to the business of Lloyd's Landscaping Supplies.

LLOYD'S LANDSCAPING SUPPLIES: TRIAL BALANCE AS AT 31 MAY 2028

	\$	\$
Cash at bank	3 200	
GST clearing		4 020
Electricity	2 555	
Inventory	59 000	
Discount revenue		680
Investment account	8 600	
Advertising	1 680	
Loan – Handy Finance		142 500
Accounts receivable	2 870	
Capital – Lloyd		286 000
Assistant's wages	22 180	
Sales – cash		74 600
Sales – credit		38 700
Interest expense	1 470	
Sales returns	500	
Drawings – Lloyd	9 720	
Accounts payable		6 800
Cost of sales	53 200	
Commission		1 800
Accountant's fees	600	
Premises	385 000	
Inventory gain		400
Discount expense	325	
Cleaning of premises	4 600	
	555 500	555 500

- a** Prepare the general journal entries required to complete the closing of the general ledger, including the transfer of the net profit (or loss) and the owner's drawings.
- b** Prepare the P&L Summary, Drawings and Capital general ledger accounts.
- c** Prepare a classified balance sheet as at 31 May 2028.
- d** Explain why closing entries should be done. In your answer, refer to the relevant accounting assumption.
- e** Consider the level of sales returns experienced by this business. Should the owner be concerned? Explain your answer fully.



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5 From trial balance to balance sheet

Carly Hughes is the owner of Higher & Higher, a paragliding equipment company. She has provided the following information in relation to her business.

HIGHER & HIGHER: ADJUSTED TRIAL BALANCE AS AT 30 JUNE 2028

	\$	\$
Accounts payable		5 750
Accounts receivable	3 870	
Bank		1 710
Capital – Hughes		66 340
Cash sales		93 400
Cleaning of shop	1 260	
Cost of sales	47 300	
Credit sales		29 700
Delivery van	26 400	
Discount expense	100	
Drawings	18 500	
General office expenses	2 100	
GST clearing		2 600
Interest on loan	1 200	
Interest on term deposit		600
Inventory	32 500	
Inventory loss	2 100	
Legal expenses	430	
Loan – Auto Finance (due 1/8/28)		13 400
Loan – NAB (repayable over four years)		12 000
Office stationery expense	450	
Rent of shop	32 400	
Sales returns	1 500	
Term deposit	14 500	
Wages – sales staff	40 890	
	225 500	225 500

- Prepare the general journal entries required to complete the closing of the general ledger, including the transfer of the net profit (or loss) and the owner's drawings.
- Prepare the P&L Summary, Drawings and Capital general ledger accounts.
- Prepare a classified balance sheet as at 30 June 2028.

6 From trial balance to balance sheet

Aiko Nelson owns and manages Shokunin, a store selling Japanese artwork and decorations. She has provided the following information at the end of her yearly reporting period.

SHOKUNIN: ADJUSTED TRIAL BALANCE AS AT 31 MARCH 2028

	\$		\$
Accounts receivable	3 200	Accounts payable	25 000
Cash at bank	2 200	Capital	352 600
Computer maintenance	700	Discount revenue	100
Computer system	5 400	Finance Co. loan	22 000
Cost of sales	81 400	GST clearing	4 320
Courier charges	980	Mortgage loan	314 000
Discount expense	300	Sales – cash	122 100
Display equipment	25 000	Sales – credit	43 880
Drawings	18 600		
Insurance expense	3 000		
Interest	6 400		
Inventory	60 640		
Inventory loss	800		
Land and buildings	642 000		
Office expenses	1 900		
Promotion costs	3 120		
Salaries	26 000		
Sales returns	1 440		
Telephone expense	920		
	884 000		884 000

The Finance Co. loan is repayable at the rate of \$200 per week. The mortgage loan requires monthly repayments of \$650.

- Prepare all relevant closing entries in the general journal, including the transfer of profit and drawings.
- Prepare the P&L Summary, Drawings and Capital general ledger accounts.
- Prepare a fully classified balance sheet as at 31 March 2028.
- Explain how your balance sheet helps to satisfy the demands of the characteristic of understandability.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain why the Drawings account should *not* be closed off to the P&L Summary account at the end of a reporting period.

Question 2 (3 marks)

Andrew Nguyen, the owner of Waterford Gift Shop, has provided the following extract from his balance sheet, which was prepared on 31 March 2028.

Owner's equity			
Capital	250 000		
Plus: Net profit	67 000	317 000	
Less: Drawings		27 000	290 000

Nguyen has also stated that his total expenses for the year just ended were \$43 500.

Complete the P&L Summary account, including all relevant entries on 31 March 2028.

Question 3 (3 marks)

The following information relates to Seaford Seafoods for the year ended 30 June 2028.

Cartage inwards	1 500	Cost of sales	46 200
Cash sales	82 300	Credit sales	12 400
Discount expense	1 200	Discount revenue	1 450
Drawings of inventory	900	Drawings of cash	31 000
Interest on loans	2 600	Interest on term deposit	1 980
Inventory gain	1 900	Sales returns	1 400

Prepare the general journal entry required on 30 June to close off the revenue accounts for this business.

Question 4 (2 marks)

Explain why revenue and expense accounts should be closed off at the end of a reporting period.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 11

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Income statements

KEY TERMS

Income statement
Profitability
Return on assets
Return on owner's investment
Cost of goods sold
Adjusted gross profit
Cartage inwards
Cartage outwards

In this chapter, you will learn how to prepare an income statement, which is one of the three key accounting reports prepared at the end of a reporting period.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the purpose of an income statement [11.1]
- **prepare** an income statement from general journal closing entries [11.1]
- **prepare** an income statement from a trial balance [11.1]
- **evaluate** a profit figure using a variety of benchmarks [11.2]
- **explain** the classification title 'cost of goods sold' [11.3]
- **distinguish** between cost of sales and cost of goods sold [11.3]
- **distinguish** between gross profit and adjusted gross profit [11.3]
- **explain** how to report discount expense and discount revenue [11.4]

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 10: Closing the general ledger



Estimated time required: 1 week





11.1

Preparing an income statement

income statement

an accounting report used to show a business's revenue, expenses and net profit (or loss)

The Profit and Loss (P&L) Summary account in the general ledger closes off revenue and expense accounts on balance day. This closing-off procedure is necessary because the balances in those accounts aren't relevant to the following reporting period.

The **income statement** is a key accounting report. Prepared at the end of each period, it provides information about a business's revenues, expenses and profit (or loss). It includes the same information as the P&L Summary account but sets it out in a more informative manner.

When you are creating an income statement, it is essential to consider two of the qualitative characteristics of accounting reports:

- *Relevance*: the income statement should convey meaningful information to its users and include all information that is likely to affect their decision-making.
- *Understandability*: the income statement (like all accounting reports) should have a simple, clear format that non-accountants can easily understand.

Income statements should also meet the requirements of the following key accounting assumptions:

- The *accrual basis of accounting*, which defines net profit as revenue earned less expenses incurred.
- *Reporting period*, which is the period of time over which revenues and expenses are measured and reported in order to determine a business's profit or loss.

Purpose of an income statement

The basic purpose of the income statement is to report on a business's profit performance over a given period. It does this by stating the business's revenue for the period and deducting its expenses. The difference between its revenue and its expenses is its net profit (or loss).

Consider the following general journal, which includes the closing entries made on 31 December 2028 in the books of Sparx Surfboards.

SPARX SURFBOARDS: GENERAL JOURNAL CLOSING ENTRIES

Date	Details	Dr	Cr
31 Dec	Cash sales	90 000	
	Credit sales	40 000	
	P&L summary		130 000
	Closing entries		
	P&L summary	105 000	
	Cost of sales		55 000
	Advertising		5 000
	Wages		20 000
	Telephone expenses		1 000
	Office rent		24 000
	Closing entries		
	P&L summary	25 000	
	Capital		25 000
	Transfer of net profit		



An income statement shows a firm's revenues, expenses and profit over a period of time.

The general journal entries are posted to the P&L Summary account as shown.

P&L SUMMARY					
		\$			\$
31 Dec	Expense accounts	105 000	31 Dec	Revenue accounts	130 000
	Capital	25 000			
		130 000			130 000

The P&L Summary account shows the net profit figure, and all revenue and expense accounts have been closed. However, information about the business's revenue and expenses still needs to be shown in a clear manner.

Designing an income statement

A formal income statement can be prepared for Sparx Surfboards using the information provided above. Figure 11.1 shows a typical layout.

Figure 11.1 Income statement

SPARX SURFBOARDS: INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2028		
	\$	\$
Revenue		
Cash sales	90 000	
Credit sales	40 000	130 000
Less: Cost of sales		55 000
Gross profit		75 000
Less: Other expenses		
Advertising	5 000	
Wages	20 000	
Telephone	1 000	
Office rent	24 000	
		50 000
NET PROFIT		25 000

Gross profit is the difference between total sales for the period and the cost of the goods that were sold.

Net profit is the final result after all expenses have been deducted from the revenue earned for the period.

Headings and labels (e.g. 'Gross profit' and 'Net profit') highlight the key areas of the report. The title of the report indicates the reporting period. This is vital when evaluating the performance of a business. For example, Figure 11.1 shows a profit of \$25 000 for the reporting period. This amount of profit might be satisfactory over six months, or exceptional over a quarter (three months), but it is very poor for an entire year. The period covered is also important when comparing results. There is little point in comparing profit for six months with a weekly result.

Profit and the balance sheet

As you saw in Chapter 10, the net profit or loss earned by a business affects the owner's equity as reported in the balance sheet. As the owner is entitled to all profits earned by their business, the net profit becomes part of the owner's equity. If the business suffers a loss, this causes a decrease in the owner's equity, which is also reported in the balance sheet.

Once a trial balance is finalised, the income statement and balance sheet can be prepared. These two reports take care of the five basic classifications of accounts that we looked at in Chapter 1, as shown in Figure 11.2.

Figure 11.2 The link between the income statement and the balance sheet



Remember

owner's equity = capital + profit - drawings

At this point, the basic accounting system has been used from start to finish:

- Source documents have been gathered.
- Transactions from those documents have been entered in the general journal.
- The general journal has been posted to ledger accounts.
- A trial balance has been used to check the accounts.
- The information in the trial balance has been used to prepare the two main financial statements.

This system allows a business owner to determine a net profit result for a period, and to state the accounting equation of the business at the end of that period.

The basic accounting system allows a business to determine its profitability (i.e. its viability) for a defined period of time.



11.2 Evaluating a net profit figure



When an income statement has been completed, that isn't the end of the accounting process. Management needs to be able to assess the profit figure in order to understand how the business is performing. The period covered is a basic consideration when evaluating the profit earned, but several other measures are also commonly used to evaluate profit (see Figure 11.3).

Profit trend

Comparing the profit earned in the current period with that earned in previous periods provides management with a profit trend over time. The trend could indicate an improvement or a decline in the business's profit performance. Two or three consecutive profit figures provide much more information than one isolated period.

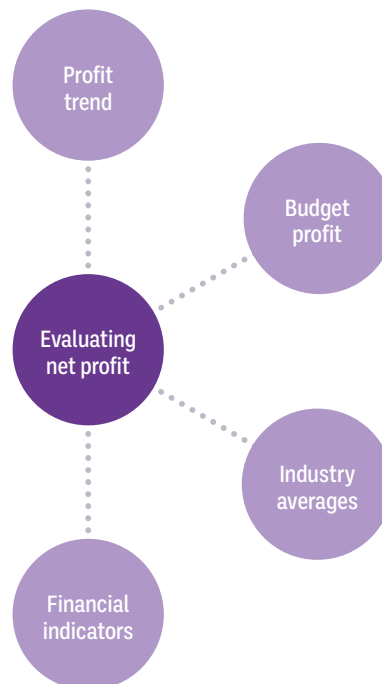


Figure 11.3 Measures for evaluating net profit

EXAMPLE 11.1

Consider the profit figures of the two businesses shown below.

Profits earned in	2024	2025	2026	2027	2028
	\$	\$	\$	\$	\$
Business A	1 000	5 000	20 000	40 000	45 000
Business B	90 000	80 000	70 000	60 000	45 000

If you looked just at 2028, you would see that both businesses earned a profit of \$45 000. However, when you consider their five-year trends, you can see that their performances were very different.

Budgeted (or expected) profit

Regardless of the trend in a business's profit figures, the profit it has earned may not be acceptable if it doesn't meet management's expectations.

EXAMPLE 11.2

Looking back to Business A in Example 11.1, the budgeted profit for 2028 was \$50 000.

Profits earned in	2024	2025	2026	2027	2028	2028
					Budget	Actual
	\$	\$	\$	\$	\$	\$
Business A	1 000	5 000	20 000	40 000	50 000	45 000

While there is a favourable trend when the 2028 profit is compared with the profit in previous years, management wouldn't be as pleased, because the business didn't achieve its profit target of \$50 000.

A business must also be able to evaluate how its performance compares with that of similar businesses in its industry.



Industry averages

Information may be available to indicate whether the business performed as well as similar businesses. In the case of public companies, detailed statistics are available regarding profit performance. For a smaller business, a public accountant may determine whether it is performing above or below the typical level for that type of business.

Financial indicators

Several indicators can be used to evaluate the profitability of a business. While *profit* is simply the excess of revenue over expenses, **profitability** measures the net profit earned against the resources available (i.e. the investment made) to earn the profit.

One financial indicator used to measure profitability is the **return on assets**. This indicator compares a business's net profit for a period with the average total assets under its control (net profit/average assets) to show how effectively it has used its assets to earn a profit.

A second profitability indicator is the **return on owner's investment**. This indicator compares the net profit with the average capital of the owner (net profit/average capital).

Unit 4 examines these indicators in detail.

profitability a comparison of the profit earned with a base figure, such as assets employed, capital invested or sales made

return on assets a financial indicator that compares net profit with the total assets of the business

return on owner's investment a financial indicator that compares net profit with the capital invested by the owner



11.3 Cost of goods sold and gross profit

An income statement is prepared to determine the net profit of a business over a period of time. It can also show the gross profit for a trading business. Figure 11.1 showed gross profit as the result when cost of sales is deducted from sales revenue. That figure shows the difference between the selling price of inventory (sales) and the cost price of inventory sold (cost of sales). This definition of gross profit may be expanded further to include other expenses incurred in buying inventory for resale.

Cost of goods sold includes any expenses incurred in purchasing inventory and preparing it for sale. It includes items such as cost of sales, cartage inwards, buying expenses, customs duty on imports, and packaging costs. All expenses that are involved with getting inventory on display and ready for sale are included in cost of goods sold. Figure 11.4 shows some of these expenses.

cost of goods sold the subheading in an income statement that includes all expenses incurred in purchasing inventory and getting items ready for sale

Figure 11.4 Cost of goods sold in an income statement

CHEFMASTER CATERING SUPPLIES: INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2028		
	\$	\$
Revenue		
Cash sales	150 000	
Credit sales	120 000	270 000
Less: Cost of goods sold		
Cost of sales	135 000	
Cartage inwards	2 000	
Buying expenses	3 000	140 000
Gross profit		130 000
Less: Inventory loss		2 000
Adjusted gross profit		128 000
Less: Other revenue		
Interest revenue		1 000
		129 000
Less: Other expenses		
Cartage outwards	1 000	
Advertising	14 000	
Office expenses	12 000	
Interest	2 000	29 000
NET PROFIT		100 000

Cost of goods sold includes all costs incurred in getting inventory into the business.

Other revenues such as interest revenue and commission revenue should be included here.

The format of this income statement follows the specifications of the VCE Accounting Study Design. Practise using this format whenever you prepare an income statement. You may lose marks if you don't use this format in examinations!

Recording revenue and expenses

Inventory losses or gains should be reported as an adjustment to the gross profit figure for the period. This produces an **adjusted gross profit**, which is simply gross profit less any inventory losses (or plus any inventory gains) that may have occurred. The adjustment allows comparisons of gross profit without being affected by other data, such as inventory losses.

If a trading business earns revenue in addition to its cash and credit sales, such items may be added to the adjusted gross profit. Or all revenue items can simply be listed together in the revenue section of the report. However, some managers prefer to keep minor items such as interest and commission revenue separate, as it can be difficult to compare and interpret gross profit results if they are included with the normal sales revenue.

Cartage inwards is the cost of postage, handling and transporting inventory. In Figure 11.4, cartage inwards is listed under 'Cost of goods sold', as it is a cost incurred in bringing inventory into the business.

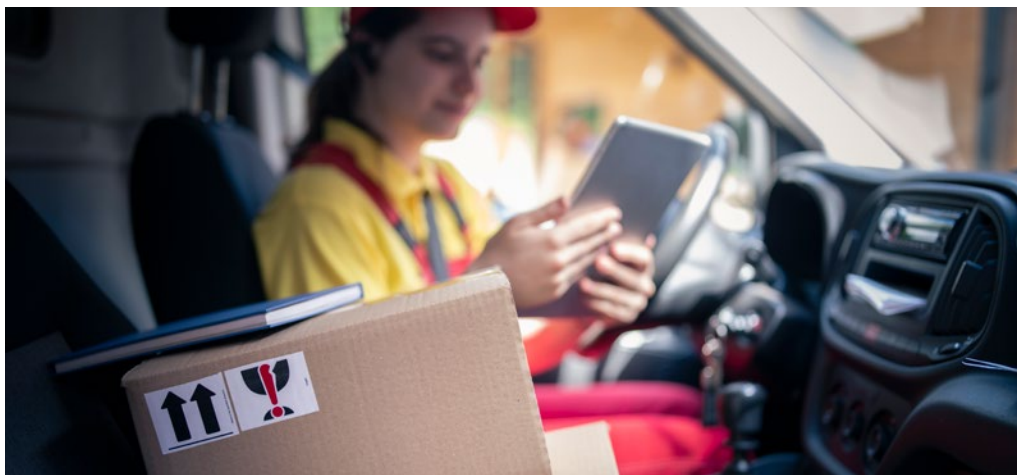
Cartage outwards, on the other hand, is the cost of delivering inventory to customers after it has been sold. It is listed with all the other expenses that aren't involved with buying and preparing goods for sale.

adjusted gross profit
the result of adjusting gross profit for either an inventory loss or an inventory gain

cartage inwards an expense incurred when inventory is delivered into a business

cartage outwards an expense incurred when inventory is delivered to a customer

Cartage is the cost of delivering inventory to or from a business.



Calculating net profit

Items such as cartage inwards and buying expenses are included as cost of goods sold because they are indirectly part of the cost of inventory – that is, they must be paid in order to get inventory ready for sale. They are reported in the *Cost of goods sold* section of the income statement and are taken into account when determining the gross profit for the period. After you have determined the gross profit, you can deduct the other expenses to calculate the final net profit figure.

EXAM-STYLE QUESTION

The following data has been provided by the owner of Seymour Sports.

Credit sales	100 000	Cash sales	120 000	Cartage in	5 000
Cartage out	2 000	Advertising	5 000	Cost of sales	95 000
Inventory loss	1 000	Sales returns	3 000	Wages	47 000

Prepare an extract from the income statement for Seymour Sports for the year ended 30 June 2028, including all relevant information down to and including adjusted gross profit.

(4 marks)

Sample answer

SEYMOUR SPORTS: INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2028

	\$	\$
<i>Credit sales</i>	<i>100 000</i>	
<i>Cash sales</i>	<i>120 000</i>	<i>220 000</i>
<i>Less: Sale returns</i>		<i>3 000</i>
		<i>217 000</i>
<i>Less: Cost of goods sold</i>		
<i>Cost of sales</i>	<i>95 000</i>	
<i>Cartage inwards</i>	<i>5 000</i>	<i>100 000</i>
<i>Gross profit</i>		<i>117 000</i>
<i>Less: Inventory loss</i>		<i>1 000</i>
<i>Adjusted gross profit</i>		<i>116 000</i>





Exam advice

Examination questions will often require you to prepare part of a financial report (such as an income statement, cash flow statement or balance sheet), rather than the complete statement. This is a test of your knowledge. In the above report, for example, you are demonstrating knowledge by NOT including wages, cartage outwards and advertising. These three items should all appear under the heading of *Other expenses* and therefore should not be included in your answer to the above question.

Don't abbreviate the titles used in an income statement. There is usually enough space provided for the full titles. You may lose marks if you use abbreviations such as 'COGS' or 'COS', or if you don't follow the set format of the income statement.

11.4 Reporting discounts



All revenues and expenses should be reported in the income statement at the end of a reporting period. A business that both buys and sells on credit may have recorded discount expense or discount revenue during any given period. How should these discounts be reported?

Discount revenue, as the name implies, is a revenue item because it occurs as a result of a reduction in the outflows payable to liabilities, which leads to an increase in owner's equity (through an increase in net profit). However, discount revenue is never the main source of revenue for a trading business, so it should be reported under the heading of 'Other revenue'.

Discount expense is listed with all other normal expense items. Discounts granted to credit customers represent a reduction in the inflows from accounts receivable, which lead to a decrease in owner's equity (through a decrease in net profit). The business is sacrificing some of the money that is owed to it by its accounts receivable. Figure 11.5 shows this treatment of discounts.

Figure 11.5 Reporting discounts in the income statement

Revenue		\$	\$
	Sales		88 000
Less:	Cost of goods sold		
	Cost of sales		42 000
Gross profit			46 000
	Other revenue		
	Discount revenue		1 000
			47 000
Less:	Other expenses		
	Wages	5 000	
	Discount expense	2 000	7 000
NET PROFIT			40 000

Reporting discounts in this way ensures that any discounts granted by suppliers or allowed to customers don't distort the gross profit reported for the period. This is important when assessing the performance of a business.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [11.1]** The income statement is a key accounting report that provides information about a business's revenue, expenses and profit. Its purpose is to report on the profit performance of the business over a given period.
- [11.1]** Once a trial balance has been finalised, the income statement and balance sheet can be prepared. These two reports take care of the five basic classifications of accounts.
- [11.2]** Several measures can be used to evaluate net profit, such as the length of the reporting period, the profit trends, whether the budgeted profit was achieved, or comparison against industry averages.
- [11.3]** An income statement can also show the gross profit for a trading business. This figure shows the difference between the selling price of inventory and the cost price of inventory sold. The heading 'Cost of goods sold' is used to include any expenses incurred in purchasing inventory.
- [11.4]** Businesses should record any discount expense and/or discount revenue during any given period. Discount revenue should be reported under the heading of 'Other revenue'. Discount expense is listed with all other normal expense items.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Income statement from closing entries

Matthew Sauro is the proprietor of Mediterranean Herb Wholesalers. On 1 March 2028, Sauro's Capital account has a balance of \$65 000. The following closing entries are extracted from the books of the business at the end of March 2028.

MEDITERRANEAN HERB WHOLESALERS: GENERAL JOURNAL

Date	Details	Dr	Cr
31 Mar	Cash sales	24 000	
	Credit sales	26 000	
	P&L summary		50 000
	Closing entries		
	P&L summary	26 600	
	Cost of sales		23 400
	Advertising		1 200
	Postage		200
	Office expenses		600
	Assistant's wages		1 200
	Closing entries		
	P&L summary	23 400	
	Capital		23 400
	Transfer of net profit		

The abbreviation 'P&L summary' is appropriate to use in the general journal and is also an acceptable cross-reference when preparing entries in the general ledger.

- Prepare an income statement for the month ended 31 March 2028.
- Prepare an extract from the balance sheet as at 31 March 2028 to show the owner's equity section, including the additional detail that Sauro had drawings of \$10 700 during March.



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2 Income statement from closing entries

Therese Wilson owns and manages Wilson's Winterwear. She has just completed her closing entries for the year ended 30 June 2028. On 1 July 2027, Wilson's Capital account had a credit balance of \$87 600. Wilson's closing entries are listed below.

WILSON'S WINTERWEAR: GENERAL JOURNAL

Date	Details	Dr	Cr
31 Mar	Cash sales	125 000	
	Credit sales	35 000	
	Discount revenue	500	
	Sales returns		1 500
	P&L summary		159 000
	Closing entries		
	P&L summary	103 000	
	Part-time wages		25 700
	Carry bags		620
	Cartage inwards		280
	Insurance		4 170
	Discount expense		230
	Cost of sales		72 000
	Closing entries		
	P&L summary	56 000	
	Capital		56 000
	Transfer of net profit		
	Capital	10 600	
	Drawings		10 600
	Transfer of owner's drawings		

- Prepare an income statement for the year ended 30 June 2028.
- Prepare the owner's equity section of the balance sheet as at 30 June 2028.



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3 Income statement from trial balance

The following trial balance is provided at the end of a quarterly reporting period.

MONTEGAN MODELS: TRIAL BALANCE AS AT 31 MARCH 2028

	\$		\$
Cash at bank	5 200	Loan – NAB	2 000
Rent	16 600	Sales revenue	71 900
Accounts receivable	5 500	Accounts payable	1 000
Stationery expense	100	Capital	59 000
Telephone expenses	790	GST clearing	1 100
Inventory	59 400		
Interest expense	480		
Drawings	3 400		
Sales returns	5 100		
Cost of sales	36 400		
Discount expense	130		
Office furniture	1 900		
	135 000		135 000

- Prepare an income statement for the quarter ended 31 March 2028.
- Prepare a balance sheet as at 31 March 2028.

4 Income statement from trial balance

Jack Chrystie is the proprietor of Chapel Street Formal Wear. He has provided the following trial balance at the end of the business's reporting period.

CHAPEL STREET FORMAL WEAR: ADJUSTED TRIAL BALANCE AS AT 31 JULY 2028

	\$		\$
Accounts receivable	11 500	Accounts payable	6 200
Advertising	1 600	Capital	56 580
Carry bags	360	Cash sales	52 000
Cartage inward	180	Credit sales	53 000
Cash at bank	880	Discount revenue	210
Cleaning	1 200	GST clearing	3 000
Computer	3 200	Loan (due 31/3/29)	29 000
Cost of sales	48 000		
Discount expense	150		
Furniture	12 300		
Interest	230		
Inventory	53 700		
Rent	15 800		
Telephone expenses	990		
Vehicle	36 500		
Vehicle expenses	1 600		
Wages – assistant	11 800		
	199 990		199 990

- Prepare an income statement for the year ended 31 July 2028.
- Prepare a classified balance sheet as at 31 July 2028.

5 Income statement with inventory loss

The following balances are extracted from the trial balance of Costello's Auto Shop as at 30 June 2028.

	\$		\$		\$
Advertising	600	Cash sales	35 000	Accounts payable	2 300
Cartage inwards	500	Cost of sales	28 500	Telephone	370
Accounts receivable	430	Buying expenses	300	Interest expense	1 400
Equipment	14 000	Accounting fees	200	Inventory	32 000
Legal fees	1 150	Stationery expense	140	Bank overdraft	1 100
GST clearing	100	Sales returns	1 000	Credit sales	32 000
Inventory loss	2 000	Shop fittings	15 000	Loan	24 000

- Select the relevant information from above and prepare an income statement for the quarter ended 30 June 2028.
- Suggest three different ways of evaluating the net profit you determined in part a.



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6 Full income statement

The proprietor of Bayswater Boutique has supplied the following information about her business for the year ended 30 April 2028.

	\$		\$		\$
Wages – assistant	36 000	Shop fittings	19 400	Accounts receivable	2 200
Cost of sales	45 300	Drawings	12 940	Cleaning	2 400
Loan (due 2030)	4 000	Interest on loan	440	Legal fees	600
Accounts payable	1 900	Discount expense	180	Electricity	2 280
Sales	98 150	Cash at bank	800	Advertising	800
Cartage inwards	450	Office equipment	9 400	Debt agency fees	600

Using the relevant information from the list above, prepare an income statement for Bayswater Boutique for the year ended 30 April 2028. Your report should highlight figures for both gross and net profit, as well as the total expenses incurred by the business.



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7 Income statement and balance sheet

The following information relates to a comic shop owned and operated by Anthony Lentini.

FIVE-STAR COMICS: TRIAL BALANCE AS AT 31 MARCH 2028

	\$	\$
Premises	850 000	
Term deposit account (matures 2031)	14 000	
Mortgage loan		535 000
Newspaper advertisements	1 050	
Cleaning of shop	5 200	
Office equipment	4 200	
Interest on loan	7 200	
Accounting fees	1 600	
Accounts payable		7 700
Cash at bank		13 850
Sales assistant's wages	22 000	
Drawings	2 340	
Cost of sales	47 320	
GST clearing		2 900
Accounts receivable	1 830	
Shop fittings	19 300	
Telephone expense	810	
Display equipment	9 000	
Inventory	74 600	
Cash sales		109 720
Electricity	1 860	
Inventory loss	800	
Interest revenue		370
Capital – Lentini		393 570
	1 063 110	1 063 110

a Prepare an income statement for the year ended 31 March 2028.

b Prepare a classified balance sheet as at 31 March 2028.

CASE STUDY

The owner of Calder Car Parts isn't sure how to prepare accounting reports. The following account balances were extracted from the trial balance of the business.

CALDER CAR PARTS: ACCOUNT BALANCES AS AT 31 MARCH 2028

	\$		\$
Cost of sales	86 500	Cash at bank	3 200
Shop shelving	10 200	Advertising	8 600
Delivery vehicle	32 000	Accounts receivable	4 300
Shop wages	32 000	Cash sales	93 200
Interest on loans	8 700	Accounts payable	5 040
Loan from NAB	82 000	Discount expense	1 240
Drawings	20 000	Credit sales	84 800
Premises	232 000	Vehicle expenses	4 400
Office expenses	10 200	Inventory	58 700
Sales returns	2 400	GST clearing	1 300
		Capital	?

- Two of the business's inventory cards didn't reconcile with a physical stocktake completed on 31 March 2028. One inventory card revealed an inventory gain of one set of car seat covers, which cost \$30 and sell for \$59. The other card had an inventory loss of 18 sets of wheel trims. These units sell for \$49 each and were originally purchased for \$35 each. All other inventory cards were reconciled with the units identified in the stocktake.
 - The loan from NAB is repayable at \$145 per week.
- a** Prepare an income statement for the year ended 31 March 2028. Your statement should highlight both gross and net profit results.
 - b** Prepare a classified balance sheet as at 31 March 2028.
 - c** Explain how you determined the value reported for vehicles in your balance sheet. Refer to a qualitative characteristic that is relevant to the value being reported.
 - d** Give two reasons to explain your classification of the GST Clearing account.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

A business owner has collected GST of \$500 during the month. As the business has experienced an inflow of resources, the owner intends to report the \$500 as revenue for the month. Is this the correct accounting treatment? **Explain** your answer fully.

Question 2 (2 marks)

Ida Down, the owner of the Sleepy Bed Store, has noticed that her business's bank account has increased by \$20 000 over the last 12 months. Down has stated that this means her business has made a healthy profit for the year.

Explain, using two examples, how a business's bank account can increase even when there is no improvement in its profit earned for the period.

Question 3 (2 marks)

The owner of Rosebud Hardware, Max Hudson, has detected an inventory loss of more than \$5000 in the current reporting period. He asks whether he should report this item in his income statement.

Explain, with reference to the definition of one accounting element, whether an inventory loss should be reported in the income statement.

Question 4: Modelling question (12 marks)

The owner of Jeans 'R' Us, Christian Randello, is thinking about expanding his business premises. The vacant shop next door to his is available for lease. The following information is available for your consideration:

- Cost price of a pair of jeans: \$40
- Selling price per pair: \$95
- Rent per month: \$16 000
- Average number of jeans sold per year over the last five years: 9 000
- Wages per week: \$2000
- Other expenses per month: \$600

If the business expanded and leased the shop next door, the monthly rent would be doubled. Additional staff would be required, which would increase the wages amount by 20%. However, sales would be expected to increase by 40% in the first year of expansion. With the increase in sales, Randello is confident he could negotiate a better deal if the business purchased its stock in bulk. The cost of jeans would then decrease by 5%.

a Prepare an Excel spreadsheet to show the net profit for a year if:

Option 1: Randello didn't expand the business and kept trading as he has in the past. (3 marks)

Option 2: Randello expanded the business and increased sales by 40%. (3 marks)

b Discuss the two options described in part a and recommend which one Randello should choose. **Suggest** other factors he should consider before making his final decision. (6 marks)



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 12

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Management and accounting reports

In this chapter, you will learn about three areas of management decision-making: inventory, accounts receivable and accounts payable.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the importance of managing accounts receivable, accounts payable and inventory [12.1–12.6]
- **describe** some basic mechanisms for controlling accounts receivable, accounts payable and inventory [12.1, 12.3, 12.5]
- **calculate** an inventory turnover rate (in days) [12.2]
- **prepare** an age analysis of accounts receivable [12.3]
- **calculate** an accounts receivable turnover rate (in days) [12.4]
- **determine** the length of the cash cycle for a trading business [12.5]
- **calculate** an accounts payable turnover rate (in days) [12.6]
- **suggest** ways a business can improve its performance by controlling its accounts receivable, accounts payable and inventory [12.1–12.6]

KEY TERMS

Just-in-time ordering
Inventory turnover
Age analysis of accounts
receivable
Accounts receivable turnover
Cash cycle
Accounts payable turnover

PRIOR KNOWLEDGE

CHAPTER 2: Balance sheets

CHAPTER 4: Double entry recording: An introduction

CHAPTER 7: The perpetual inventory system



Estimated time required: 1 week





12.1 Controlling inventory

Decisions about inventory have to be made continuously throughout the life of a business.

One of the most important parts of managing a trading business is controlling inventory. The buying and selling of inventory is the lifeblood of a trading business. Management's decisions about inventory often determine the success or failure of a trading business – and these decisions must be made constantly.

Questions managers face on a daily basis include:

- What inventory should we buy?
- How many of each item?
- What size range (e.g. for a clothing business)?
- What colour range, particularly for fashion-based businesses?
- Which brand names should be part of our inventory?

In many small businesses, inventory is the most valuable asset reported in the balance sheet (especially when the business rents its premises instead of owning land and buildings). Inventory is therefore a key investment for a business owner, so it must be monitored constantly throughout a reporting period.

Under the perpetual inventory system, the goods purchased for resale are represented in the general ledger by the Inventory account. You have already seen that the Inventory account has a key role in helping a business to control its inventory. The Inventory account is represented by a system of inventory cards (one card for each line of inventory). Management needs to reconcile these two types of records on a regular basis.

Inventory control procedures

There are many more procedures that management can adopt to control a business's inventory, as summarised in Figure 12.1.

Figure 12.1 Inventory control procedures



Setting minimum and maximum levels of inventory

Management should consider every type of inventory separately, decide on an ideal quantity for each line, and set minimum and maximum levels. A business that carries *too little* inventory is likely to miss out on potential sales. A business that carries *too much* inventory may suffer from 'dead inventory' – goods that it can no longer sell because of changes in fashion or in season, or as a result of technological change.

Deciding what is too little and too much inventory is often difficult and is a matter of personal judgment.

In a perfect situation, the minimum quantity should be just enough to satisfy sales until a new order is delivered. Many small business owners try to follow the principle of **just-in-time ordering**, where replacement orders of inventory arrive just as the last few items of the current inventory are used up. Of course, this doesn't always happen in practice, as customers aren't always predictable in their behaviour.

just-in-time ordering

purchasing inventory so that the new order of goods arrives just before the business runs out of inventory

Physically rotating inventory on hand

When a new delivery of inventory arrives at a store, it shouldn't simply be stacked on top of existing inventory. The older units on hand should be placed on prominent display, so that they are sold first, with the new units placed out of sight or reach.

This is particularly important for perishable items. Many items – food, batteries and medicines, for example – carry use-by dates, and such items are difficult to sell if these dates have almost expired. Other types of inventories should also be rotated, because the longer an item sits in a shop or on a shelf the more likely it is to become dirty, dusty or damaged. Inventory affected like this is referred to as 'shop-soiled'. It's difficult to sell shop-soiled inventory, so management should always look after the business's inventory and present it in the best possible way. Rotating inventory is one way of doing this.

Note

Inventory is rotated by physically moving goods, which is different from the assumption of First-In, First-Out (FIFO) inventory valuation. Even when inventory is regularly rotated, there is still a possibility that customers will select an item from the bottom of a stack or the back of a shelf. For example, many customers will take milk from the back of the fridge, even if it means they have to move items in front first!

Remember

FIFO is an *assumed* inventory flow. Although management might hope that inventory moves on a first-in, first-out basis, this probably won't be what actually happens on the shop floor.

Inventory cards must be regularly reviewed, and slow-moving lines identified and dealt with. Perhaps a clearance sale is required. Management may decide not to sell a particular line in future, or it may look for a replacement product that will sell more quickly.



Rotating inventory helps to minimise shop-soiled items, which are harder to sell.

The worst thing management can do is to do nothing. Slow-moving inventory has the potential to ruin a trading business. Once goods have been paid for, they need to be sold to generate a cash inflow. Inventory is the key to success in a trading business; if the business is not selling its inventory fast enough, it may fail.

The definition of 'slow-moving' inventory depends on the nature of the goods. Some inventory may be slow-moving compared to other goods on sale, but be more highly profitable. For example, a department store sells both clothing and furniture, and inventory in the clothing area sells at a much faster rate than inventory in the furniture department. Management may tolerate this because furniture sales, although slower than clothing sales, may be much more profitable. Therefore, when identifying slow-moving lines, always consider the nature of the inventory.

Monitoring seasonal products

If a trading business has products that are subject to seasonal demand, management must pay special attention to these items. Towards the end of the 'season', such inventory must be run down to a very low level or cleared out completely. Otherwise, the business is left with items that it cannot sell for another year.

For example, in Victoria there is a huge industry in sporting apparel, particularly football clothing. However, there is little point in purchasing lots of football jumpers in October. Most sports stores have clearance sales in August or September, so that all football inventory is sold before the end of the season. This ensures that there is little or no dead inventory sitting in the shop from October to February each year. Once the summer season has passed, management may stock a fresh range of merchandise to meet demand during the new winter season.

Monitoring technological obsolescence

Some trading businesses are affected by rapid technological change, such as those selling televisions, computers and mobile phones. It may not be wise to buy a particular model in bulk just because a supplier is offering a good price. If customers aren't going to buy the product because there is a new and improved model on the market, the business may again be left with dead inventory.

Therefore, management in such industries must be careful not to over-commit to inventory purchases. They must always be aware of the latest trends in product development in order to maximise sales from the inventory held.

Unless they are sold quickly, some inventory items may become obsolete stock, due to a lack of market value or poor demand from consumers.



Introducing complementary products

One way of improving the turnover of inventory is to have a range of complementary products available for customers. An increased range of inventory may attract additional customers and improve the chances of selling the established lines of inventory.

Management should consider what products it could sell to complement the products it already has available. For example, a menswear store will usually sell belts and ties as well as shirts and trousers. A mobile phone store will also sell battery packs, phone cases and covers, headphones and so on.

Changing with the times

Regardless of the nature of the inventory a business sells, all business owners should stay alert for changes in their industry. This can mean watching out for new products or monitoring what their competitors are doing. A business that does the same thing year after year will often fail.

Managing inventory is a dynamic process. A top seller one year may become a slow mover in another year. Management must monitor all its inventory lines and be ready to react to changing demand. The amount and speed of change will depend on the nature of the business. However, those business owners who refuse to change may find they lose their place in the market and may even be forced out of business.

Monitoring selling prices

It is essential that all businesses constantly review their selling prices to ensure that their profit margins cover their expenses. Inventory can be sold very quickly if selling prices are slashed, but there is no point in selling thousands of items if the product isn't going to produce a profit.

Management must also monitor cost prices closely, as an increase in costs will decrease the business's profit margin. An increase in cost prices will usually require an increase in selling prices. However, a business facing intense competition may be limited in how much it can raise its selling prices before this has a significant impact on turnover.

Ensuring adequate security

An important part of managing the inventory of a business is security. After cash, inventory is the asset most likely to be targeted for theft. Customers may steal inventory if adequate security isn't in place. Although shoplifting is often a major concern, the business's staff may also be involved in fraud and/or theft. Inventory control procedures should tackle potential problem areas. The manager of a small business should consider what security is required for their particular store and take appropriate measures.

Ongoing management of inventory

Managing inventory is an ongoing responsibility. Inventory must be constantly reviewed in terms of its security, turnover and general performance. If a trading business fails to manage its inventory effectively, its overall performance – and the returns to the owner in terms of profit – will suffer. As the success of a trading business is based on buying and selling goods, it's crucial that it manages and controls its inventory.



12.2 Evaluating inventory turnover

inventory turnover a financial indicator that determines how quickly a business can turn its inventory into sales

Inventory must be turned into sales, and therefore into cash, within a reasonable time. This allows a trading business to function on a day-to-day basis. Inventory can be paid for, expenses can be met and, hopefully, a profit can be earned. But what is an acceptable period of time for a trading business to turn its inventory into sales?

All businesses – and all industries – are different. However, a good starting point is the **inventory turnover** rate, which management can use to evaluate the success or otherwise of its investment in its inventory.

$$\text{Inventory turnover} = \frac{\text{Average inventory} \times 365}{\text{Cost of goods sold}}$$

This indicator compares the level of inventory held by a business during a period with the sales made in the period, at cost price.

Consider the following example, based on end-of-year data for three consecutive periods for Sandown Skates Shop.

	2026	2027	2028
	\$	\$	\$
Inventory on hand	55 000	57 000	59 000
Cost of goods sold		240 000	274 000

The first step is to determine the average level of inventory held by the business. Using an average figure helps to prevent the rate from being distorted by any significant increase or decrease in inventory levels during a particular reporting period.

- At the end of 2026 the business had inventory valued at \$55 000, and this grew to \$57 000 by the end of 2027. Over 2027, the average inventory is $(\$55\,000 + \$57\,000)/2 = \$56\,000$.
- Similarly, the average inventory level for 2028 is $(\$57\,000 + \$59\,000)/2 = \$58\,000$.

Once the average inventory figures for both periods are known, the inventory turnover can be calculated.

$$\text{For the year 2027: } \frac{\$56\,000 \times 365}{\$240\,000} = \frac{\$20\,440\,000}{\$240\,000} = 85.16 \text{ or } 85 \text{ days}$$

$$\text{For the year 2028: } \frac{\$58\,000 \times 365}{\$274\,000} = \frac{\$21\,170\,000}{\$274\,000} = 77.26 \text{ or } 77 \text{ days}$$

Note

If average inventory figures are unavailable, use data for inventory at the end of the period to calculate inventory turnover.

The data calculated for Sandown Skates Shop indicates that, in 2027, this business turned its inventory into sales every 85 days. In the following reporting period (2028) the inventory turnover was faster; the business took only 77 days to turn its inventory into sales. This means that the inventory has been moving out of the business at a faster rate in 2028 than in 2027. It also means there is a lower likelihood of having idle inventory in 2028 than in 2027.

These results indicate that management has been more efficient in controlling its inventory. Although this could be the result of a variety of management decisions, it's generally viewed as a positive result.

Examining turnover

How do we know if inventory turnover is favourable? There are three main ways to evaluate inventory turnover.

- **Compare it with inventory turnover in previous reporting periods.** This is an ideal starting point, as it gives management a historical perspective and allows comparisons to be made easily with the current period.
- **Compare it with management's expectations.** With Sandown Skates, an improvement was noted because inventory turnover was faster in 2028. However, if management had set a target of 70 days in 2028, the turnover rate – although faster than that achieved in 2027 – wouldn't have met expectations. Therefore, consider both the change in the turnover rate and management's goals when evaluating inventory turnover.
- **Consider the type of inventory.** This is possibly the best way to decide if a particular turnover rate is satisfactory or not. A bakery will have a much higher rate of inventory turnover than a used car yard, and a cafe has a much higher rate of turnover than a hardware store. There is no such thing as an ideal inventory turnover rate; it depends on the type of inventory being sold.

After it has determined an acceptable rate of turnover, management should try to maintain or improve it to ensure that their investment in inventory is producing revenue at a satisfactory rate.

When examining inventory turnover, bear in mind that the rate determined is an *average* for a period. Many businesses sell a range of inventory, not just one type of product. Some of these items may turn over quickly, while other products may experience a much slower turnover rate. For example, a typical supermarket sells milk, fresh bread, pasta sauces, mineral turpentine and mouse traps (among other items).

- The fresh milk and bread sections may have a goal of being sold out on a daily basis. Therefore, these two types of inventory may have a turnover rate of one day.
- The inventory of pasta sauces takes several days to sell out.
- Mineral turpentine takes two weeks to clear the shelves.
- Mouse traps may take a month to sell out.

When inventory turnover is determined for this supermarket, it may be as low as 8–10 days, which is the average turnover rate based on its investment in inventory. This average reflects the great range of products that the business sells, and so management needs to be careful when interpreting results.



A typical supermarket needs to sell out its milk section in one day.

Managing turnover rate

Every business is unique, which means that comparisons with turnover rates achieved in a business's previous reporting periods are more relevant than comparisons with rates in other businesses. Differences between businesses may make comparisons of turnover rates meaningless.

Factors that can influence the turnover rates of different businesses within an industry include:

- the range of products being sold
- the length of time a business has been operating
- the size of a business
- competition in the local area.

If management detects a problem with its inventory turnover, it should act to improve the situation and shorten the time taken to turn inventory into sales. Some possible tactics are:

- reduce the selling price of slow-moving items
- relocate inventory within the store to highlight particular goods
- run special promotions of targeted inventory lines
- combine items to promote particular products (e.g. ice cream and drink combos).

To succeed in managing and controlling inventory, a business must also continuously review the performance of all the items it sells. If management checks movements of inventory by regularly reviewing its inventory cards, it will have enough information to make decisions that allow it to control its inventory and to improve its performance where necessary.

EXAM-STYLE QUESTION

Explain two benefits for a business owner if they can achieve a faster inventory rate than that achieved in the previous period. (2 marks)

Sample answer

First benefit: a faster inventory turnover rate may help with improving the liquidity of the business. This is because inventory is being turned into cash at a faster rate.

Second benefit: as inventory is being turned over faster, the business may be selling more goods and therefore it would have a greater opportunity to make a profit. An increase in sales should result in a higher net profit, assuming expenses haven't increased over time.

Exam advice

When considering financial indicators, be prepared to describe both the change in the rate and how it affects the business. Note that, in the above example, there are two totally different responses. The first benefit relates to liquidity, while the second relates to profit. Don't restrict your thinking. Many financial indicators can affect both liquidity and the profit for a period. Another important point to keep in mind is that, although we practise calculating financial indicators in class, the examiners don't usually ask you to calculate such data. While you do need to understand how the indicators are calculated, in exams the emphasis will be on commenting on changes and explaining what the indicators mean.

Don't use the terms 'increase' or 'decrease' when referring to turnover rates. Always use 'faster' or 'slower' when referring to changes in indicators relating to turnover.

12.3 Controlling accounts receivable



Once management has addressed the issue of controlling and turning over its inventory, it needs to consider how it manages sales. If goods are always sold for cash, management can focus solely on the turnover of inventory. However, a business that makes credit sales must evaluate how it manages its accounts receivable.

Selling on credit may increase inventory turnover, as new clients are attracted by the credit facility. But there is little benefit in providing credit if management can't control the business's accounts receivable and keep them within certain limits. Ultimately, accounts receivable aren't valuable assets until the business can turn them into cash.

Granting credit to customers

All credit sales have an element of risk, with the ultimate one being non-payment by accounts receivable. Before granting credit to a customer, management should perform a credit check to determine if the potential client is an acceptable risk.

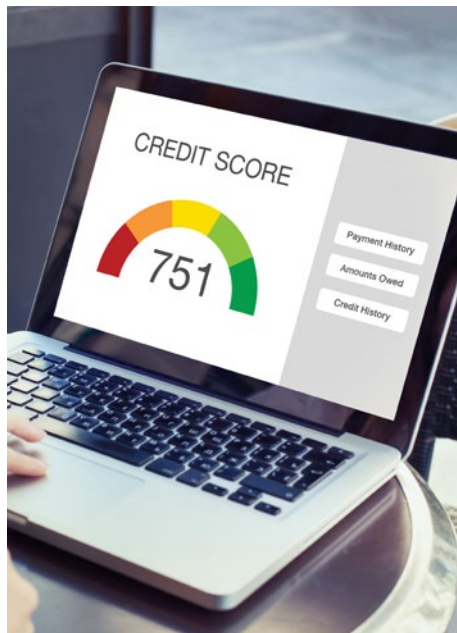
In larger businesses, a credit check may be extensive, including items such as the customer's:

- banking history
- loans and/or credit card history
- references from other businesses
- references from financial institutions
- cash forecasts and/or budgets
- income statements
- balance sheets.

Smaller businesses often use agencies to conduct credit checks on the business's behalf. The agencies charge a fee for their services, but this is small compared with the potential cost of selling on credit to a customer with a poor credit history.

Small businesses rarely ask for a full set of accounting reports from a potential customer. However, it's common to ask for references from other businesses that have provided credit in the past. If a potential client cannot provide such references, a small business owner may insist on cash sales until a relationship is established.

Many small businesses now use EFTPOS rather than offering credit to customers. Sales made via debit or credit cards are virtually cash sales to a business owner, as they don't have the risk of non-collection. Instead, banks provide credit to their customers when the customer uses a credit card; this means the bank, rather than the business owner, has the problem of following up with a slow payer or a non-payer in the future.



A credit check helps to determine whether a customer is an acceptable risk.

Managing credit customers

Once a business has an established list of credit customers (accounts receivable), it must monitor them to ensure they pay on time. If it grants credit terms of 30 days to customers, for example, it's reasonable for the business owner to expect to receive cash about a month after sale. If accounts are not paid in time, the owner should take action.

If a business uses a computerised accounting system, it's easy to keep track of accounts receivable as software programs issue reminders when accounts become overdue. In a manual system, managers have to be more vigilant to ensure that overdue accounts aren't overlooked.

If a business sells on credit, management may adopt a range of tactics to get payment, such as:

- offering discounts for prompt payment
- sending reminder emails to accounts receivable
- reminding accounts receivable by phone, so as to make personal contact
- sending regular statements, possibly stamped with 'OVERDUE!' if that is the case
- threatening not to provide credit in the future
- threatening the customer with legal action
- employing a debt collector
- taking legal action to recover the debt.

Managing credit customers requires a good working relationship, but sometimes other tactics need to be introduced to encourage payment.

This list includes a wide range of tactics, from the relatively mild (sending an email) to the extreme (taking legal action).

Some accounts receivable may take offence at being chased for money. While a business owner has a legal right to pursue slow payers or non-payers, they should do this tactfully so they don't lose a good customer. Some accounts receivable may be slow payers but big or reliable clients; in this case, the value of future sales could easily outweigh the value of one delayed payment.

Small business owners need to know their credit customers well, and how to encourage them to pay overdue accounts without causing them embarrassment. Some slow payers will always wait for an overdue account reminder; other customers will always pay as soon as they receive an invoice. Knowing the business's accounts receivable is always a challenge, but it's vital when chasing up overdue accounts.

Conducting an age analysis

To gain a greater insight into a business's accounts receivable, it's possible to analyse them in terms of the time that's passed since the credit sales were originally made. An **age analysis of accounts receivable** classifies accounts receivable according to the age of their debt. That is, it shows how much time has passed since the credit sales were actually made. This is vital information because the older a debt becomes, the more likely it is that it will become a bad debt. Figure 12.2 provides an example of an age analysis of accounts receivable.

age analysis of accounts receivable a table that classifies accounts receivable according to the age of their debt

Figure 12.2 Age analysis of accounts receivable

Total accounts receivable	0–30 days	31–60 days	61–90 days	91 days and over
\$14 000	\$10 500	\$2 000	\$1 000	\$500
100%	75.0%	14.3%	7.1%	3.6%

Amounts owing for more than 90 days will often turn into bad debts.

This age analysis shows that the total accounts receivable of the business add up to \$14 000. It then breaks this \$14 000 into categories, based on how long the debt has been unpaid. Such an analysis enables management to evaluate its collection procedures.

For example, if accounts receivable were allowed 30 days' credit, the majority of the accounts receivable balances should be in the first section of the age analysis table. If this isn't the case, it indicates that the credit terms offered are being abused. This may lead to cash flow problems for the business, as cash may not be coming into the business quickly enough.

Although 75% of the accounts receivable in this example are in the 0–30 days category, a problem may still exist. A total of 10.7% of accounts have gone beyond two months, and 3.6% of total debts outstanding are over the 90-day mark. Such accounts receivable would have been issued with several reminders over the three-month period, but their accounts are still not settled. The longer these accounts remain unpaid, the more likely they are to turn into bad debts.

An age analysis of accounts receivable should be prepared regularly (preferably monthly) and compared with previous analyses so that management can see any trends emerging. If the comparison shows that a higher percentage of accounts receivable have moved into the 0–30 days category, this indicates that management has gained better control over its accounts receivable. On the other hand, if management isn't following up effectively, more accounts receivable may be slipping into the lower groups. This indicates a real problem in terms of credit control, and there may be serious consequences if the situation isn't corrected quickly.

12.4 Evaluating accounts receivable turnover



In addition to preparing an age analysis, management may choose to calculate the **accounts receivable turnover** to help assess the level of control the business has over its accounts receivable. This compares the average amount owing by accounts receivable over a year with the credit sales made during this period. This figure must also include the 10% GST added to all sales. Therefore, the formula is:

accounts receivable turnover
a financial indicator that determines the average time taken by accounts receivable to settle their accounts

$$\text{Accounts receivable turnover} = \frac{\text{Average accounts receivable} \times 365}{\text{Net credit sales} + \text{GST}}$$

Note that this formula only applies to those sales made on credit, as cash sales don't affect accounts receivable.

Consider the following example, based on end-of-year data for three consecutive reporting periods for Sandown Skates Shop.

	2026	2027	2028
	\$	\$	\$
Balance of accounts receivable	8 000	10 000	7 000
Credit sales		80 000	100 000
GST charged		8 000	10 000

First, determine the average amount that accounts receivable owe to the business. This will help to prevent the rate being distorted.

- At the end of 2026, the accounts receivable of Sandown Skates owed \$8000, and this increased to \$10 000 by the end of 2027. Over the year, the average accounts receivable would be $(\$8000 + \$10\,000)/2 = \$9000$.
- Similarly, the average accounts receivable for 2028 is $(\$10\,000 + \$7000)/2 = \$8500$.

Having determined average accounts receivable for both periods, the accounts receivable turnover can be calculated.

$$\text{For the year 2027: } \frac{\$9000 \times 365}{\$88\,000} = \frac{\$3\,285\,000}{\$88\,000} = 37.3 \text{ or } 37 \text{ days}$$

$$\text{For the year 2028: } \frac{\$8500 \times 365}{\$110\,000} = \frac{\$3\,102\,500}{\$110\,000} = 28.2 \text{ or } 28 \text{ days}$$

Note

If average accounts receivable figures are unavailable, the accounts receivable turnover may be calculated using data for end-of-period accounts receivable.

The results for Sandown Skates are favourable: the credit sales figures have increased over time, while the amount owed by accounts receivable decreased during 2028. It's a positive outcome when a business can sell more on credit while keeping control over its accounts receivable. This indicates that, even with a greater amount of credit sales, the accounts receivable are being collected at a faster rate and are under control.

Perhaps the management of Sandown Skates tightened its follow-up procedures once goods had been sold on credit. Or it may have decided to offer incentives for early payments (such as discounts), which its customers have accepted. Whatever was done, it appears to have improved its performance in terms of controlling its accounts receivable.

Comparing turnover with credit terms

The accounts receivable turnover, expressed in days, can be compared with the credit terms granted to accounts receivable at the point of sale. For Sandown Skates Shop, the business's accounts receivable took an average of 37 days to settle their accounts in 2027, but only 28 days in 2028. The reduction in time taken is favourable, because the business is receiving cash at a faster rate. This is particularly important for the business's liquidity: the less time taken to collect debts, the sooner it gains the cash it needs to meet its own obligations.

If a business trades on 30 days' credit, an average collection period of 28 days would usually be seen as acceptable. As 28 days is an average, this means that some accounts receivable took less than 30 days to settle their accounts, while others may have taken much longer to pay their debts.

In 2027, Sandown Skates' accounts receivable were taking an average of 37 days to settle their debts, which was longer than management expected. It responded in 2028 by improving its follow-up procedures. The figures appear to support the notion that management took corrective action during 2028 and reduced the time taken to collect debts.

Note the assumption that this business trades on 30 days' credit. If it sold on 60 days' credit, for example, the turnover rates would be seen in a different light, and the results would be viewed as highly satisfactory. This shows the importance of comparing accounts receivable turnover with the *actual* credit terms offered. The control of accounts receivable is dependent on the credit terms on offer and management's ability to enforce those terms.

Managing accounts receivable turnover

Once management has compared the credit terms and the accounts receivable turnover, it should also compare this indicator with results from previous reporting periods to allow it to identify any noticeable trends. Management should also set targets for such indicators and measure turnover results against these predetermined rates.

If accounts receivable turnover has been a problem in the past, management may set a standard of performance that has to be met within a set period. This provides a target for measuring success or failure at the end of the reporting period.

The results of the accounts receivable turnover are mostly dependent on internal factors, and comparisons with other businesses are of little value.

12.5 Evaluating the cash cycle



Inventory turnover and accounts receivable turnover play important roles in the success of trading businesses. These two financial indicators have a close relationship. A trading business is involved in a continuous process of buying goods, turning these goods into sales, and then turning these sales into cash. This whole process is known as the **cash cycle** of business, which is the time a business takes to collect cash from the inventory it bought for resale. The cash cycle is therefore the sum of the inventory turnover and accounts receivable turnover.

Figure 12.3 shows the cash cycle as a flow diagram.

cash cycle the process of turning inventory into sales, and then turning these sales into cash

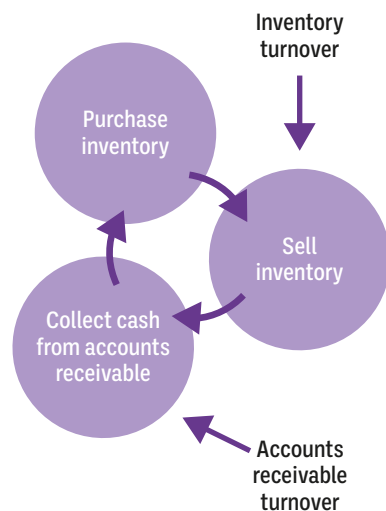


Figure 12.3 The cash cycle of a trading business selling on credit

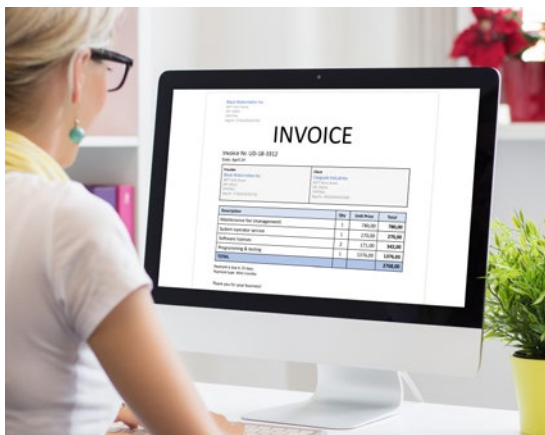
The business's cash cycle can be determined using the indicators calculated for Sandown Skates Shop.

	2027	2028
Inventory turnover (in days)	85	77
+ Accounts receivable turnover (in days)	37	28
= Cash cycle	122	105

Combining the two turnover rates gives management a complete summary of what has happened in the business in terms of these crucial current assets.

For Sandown Skates Shop, improvements have been achieved in both turnover rates. These improvements mean that, on average, the cash cycle of the business is 17 days faster ($122 - 105 = 17$). The business is therefore receiving cash from its investment in inventory 17 days faster than it did in the previous year.

The cash cycle is the sum of the inventory turnover and accounts receivable turnover.



This trend is very positive, because the cash is available at an earlier date for management to use as it sees fit. For example, it may gain discounts because it can settle its accounts payable sooner. Or interest on the business's overdraft may be reduced because it can decrease or even eliminate the overdraft. It's always an advantage to have the cash cycle happening at a faster rate.

Interpreting the cash cycle

The cash cycle is made up of two components, so movements in one component may be offset by opposite movements in the other component. For example, inventory turnover may be five days faster, while accounts receivable turnover may be five days slower. This makes it appear as if the cash cycle hasn't changed, because the overall figure may be consistent from one period to the next.

This means that management must monitor *both* components of the cash cycle. If one turnover rate improves, it may be time to concentrate on the other rate so that the business's overall performance still improves over time.

As with all analytical tools, the cash cycle examines relationships between different items, so it can be used to inform management of perceived problems. How management reacts to these problems has a major impact on the business's success or failure.

Turnover rates are just another source of financial information to be used by owners and managers. Ultimately, these people need to make decisions that lead to changes in the cash cycle that strengthen the business and make it perform better in future periods.



12.6 Evaluating accounts payable turnover

A business doesn't need to control accounts payable, but instead manage them in a way that helps to satisfy its needs.

Accounts payable are a useful source of credit. Many trading businesses purchase their inventory requirements from accounts payable (known as trade credit) for two basic reasons:

- Trade credit gives a business time to sell its inventory and turn it into cash.
- Trade credit is basically interest-free finance. It's a short-term credit arrangement that doesn't involve interest (except in a small number of arrangements).

For example, in retail it's common practice for retailers to purchase inventory on 30 days' credit. Their objective is then to have a cash cycle fast enough to meet demands for payment at the end of this 30-day period. This isn't always possible, but it's a common objective to try to keep accounts payable in line with the business's cash cycle.

The cash cycle flow diagram in Figure 12.3 can be modified to represent this concept. Figure 12.4 represents the ideal situation for a trading business. It shows a cycle of buying goods, selling goods, collecting cash, and then ultimately paying cash to accounts payable at the end of the cycle.

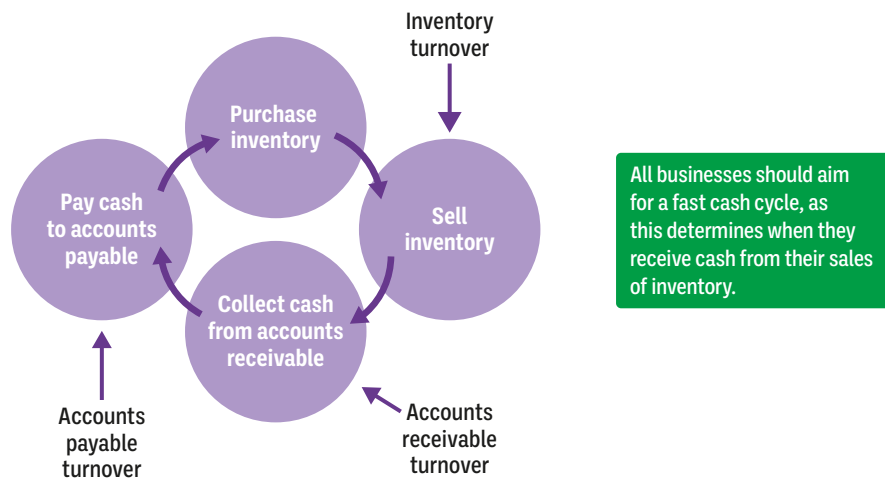


Figure 12.4 The cash cycle of a trading business buying and selling on credit

All businesses should aim for a fast cash cycle, as this determines when they receive cash from their sales of inventory.

Unfortunately, things don't always happen in this order; management can find the payment of accounts payable becomes a balancing act. A business owner doesn't set out to upset anyone who provides inventory on credit, but sometimes they may be late with payments. Suppliers expect to be paid on time, and it's a dangerous practice to always pay late. If a business owner continually makes excuses for non- or late payment, suppliers may refuse to supply goods on credit to the business in future.

However, when a business owner experiences problems with slow inventory turnover or has problems with slow-paying accounts receivable, it may deliberately delay payments to accounts payable. If a business is experiencing a severe cash shortage, there may be little choice but to put off accounts payable for a few weeks. At other times a business may have excess cash, allowing it to settle accounts promptly.

Therefore, when evaluating **accounts payable turnover**, keep in mind that other factors within the business may determine when accounts payable are settled.

accounts payable turnover
a financial indicator that determines the average time taken by a business to pay its accounts payable

Calculating accounts payable turnover

Accounts payable turnover is calculated in a similar fashion to that of the accounts receivable turnover. Instead of credit sales, credit purchases for the period are used, and this figure is compared to the average amount owed to accounts payable.

$$\text{Accounts payable turnover} = \frac{\text{Average accounts payable} \times 365}{\text{Net credit purchases} + \text{GST}}$$

Note

This financial indicator only considers purchases made on credit, as cash purchases don't affect accounts payable.

Consider the end-of-year data for three consecutive reporting periods for Sandown Skates Shop.

	2026	2027	2028
	\$	\$	\$
Balance of accounts payable	4 000	6 000	5 000
Credit purchases		40 000	50 000
GST charged		4 000	5 000

$$\text{For the year 2027: } \frac{\$5000 \times 365}{\$44\,000} = \frac{\$1\,825\,000}{\$44\,000} = 41.1 \text{ or } 41 \text{ days}$$

$$\text{For the year 2028: } \frac{\$5500 \times 365}{\$55\,000} = \frac{\$2\,007\,500}{\$55\,000} = 36.5 \text{ or } 37 \text{ days}$$

The trend in this indicator is usually viewed as favourable: credit purchases have increased over time, yet the average repayment period is four days faster (from 41 to 37).

The reason for such a change may be difficult to identify, although it could be linked to improved accounts receivable turnover. You saw in Section 12.4 that Sandown Skates reduced the average collection period from accounts receivable from 37 days to 28 days over this two-year period. As the business was receiving cash at a faster rate from its accounts receivable, this may have allowed it to settle its accounts with its suppliers at a faster rate as well.

Managing turnover rate

The accounts payable turnover rate should be compared to the credit terms offered by suppliers. Some suppliers may tolerate an occasional late payment, but they won't be happy if their credit terms are continually abused. A creditor may cut off supply to a business if it is always late with its payments. This may be a hefty penalty, particularly if the supplier's products are a fast-moving inventory item.

The accounts payable turnover should also be compared with previous reporting periods, to identify any significant trends. Management's budget expectations may also be used as a criterion for measurement. Keep in mind that the accounts payable turnover may change because of the needs of the business at a particular time.

The ability to repay accounts payable may reflect the current liquidity of the business – its ability to meet its short-term debts as they fall due. For example, if ample cash resources are available, the accounts payable turnover may fall sharply. At other times, cash reserves may be low, perhaps because of seasonal variations or because the economy has slowed down. If consumers aren't spending, inventory turnover will fall, and accounts receivable turnover may also slow down as money becomes tight.

The tasks of managing and controlling inventory, accounts receivable and accounts payable must not be viewed as isolated activities. They are the most crucial tasks for any manager of a small business that is involved in trading activities. A manager who doesn't give these areas sufficient attention is risking failure. The success of a business depends on its ability to buy and sell inventory at a fast enough rate, to collect cash from accounts receivable and to pay cash to accounts payable. A trading business is all about managing the balancing act between its cash cycle and its accounts payable turnover.

Late payments can lead to a loss of cash flow, impacting a business's ability to pay its own bills, to invest in growth opportunities, and even to meet its payroll obligations.





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [12.1]** One of the most important aspects of managing a trading business is controlling inventory. The Inventory account and inventory cards are key tools in inventory control, although many other procedures can also assist.
- [12.2]** The inventory turnover rate is a financial indicator that shows how quickly a business can turn its inventory into sales. Faster turnover is generally better, but each business and industry will have different criteria for the ideal rate.
- [12.3]** Businesses that make credit sales must monitor and evaluate how they manage accounts receivable and avoid bad debts. A key tool for this is an age analysis of accounts receivable, which classifies accounts receivable according to the age of their debt.
- [12.4]** The accounts receivable turnover rate is a financial indicator that shows the average time accounts receivable take to settle their accounts.
- [12.5]** The cash cycle is the time the business takes to collect cash from the inventory it has bought for resale. It is the sum of the inventory turnover and accounts receivable turnover.
- [12.6]** The accounts payable turnover rate is a financial indicator that shows the average time a business takes to pay its accounts payable.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Inventory turnover

On 1 January 2028, Total Turntables had inventory on hand of \$46 400. During 2028 the business sold goods for a total of \$294 000. The cost price of goods sold totalled \$206 480, and inventory as at 31 December 2028 is valued at \$42 200. The management of the business states that the inventory turnover in 2027 was 87 days.

- Calculate Total Turntables' inventory turnover for 2028.
- Compare the results of 2028 with those achieved in 2027. Comment briefly on the trend in the inventory turnover rate.



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2 Comparing inventory turnovers

The following information relates to two similar businesses.

	Ballarat Books	Bendigo Books
	\$	\$
Inventory as at 1 January 2028	54 200	51 600
Inventory as at 31 December 2028	52 800	54 200
Cost of goods sold for 2028	307 625	280 370

- Calculate the inventory turnover in days for each of these businesses for 2028.
- Which business managed its investment in inventory more efficiently during 2028? Explain your answer fully.
- What other information could you use to evaluate the success or otherwise of the inventory turnover rates determined in part **a**?
- 'If the inventory turnover is faster, it means the business has sold more goods.' Do you agree with this statement? Explain your answer fully.



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3 Trends in inventory turnover

Pat Carrier is the owner of Carrier's Camping Gear. He provides the following financial data from his business records.

	2025	2026	2027	2028
	\$	\$	\$	\$
Cost of goods sold	122 000	124 000	128 000	134 000
Balance of inventory	35 600	36 000	38 500	44 500

Carrier is quite happy with the business's performance over the last few years, as he has noted that the cost of goods sold has increased every year.

- Calculate the inventory turnover for Carrier's business for the years 2026, 2027 and 2028.
- Comment on Carrier's observations about the business's performance, taking into account your turnover calculations.
- Explain how inventory cards can assist an owner of a trading business to improve inventory turnover results.

4 Accounts receivable turnover

Fichera's Fabrics had total accounts receivable of \$12 400 on 1 January 2028, while on 31 December 2028 accounts receivable were \$11 600. Credit sales for the year were \$174 000, plus GST. The business offers credit customers 30 days to settle their accounts.

- Calculate the accounts receivable turnover in days to show the average time taken for settlement of accounts.
- Comment on the performance of the business in controlling its accounts receivable.
- Explain how an age analysis of accounts receivable may help management to control its accounts receivable.
- If this business has inventory turnover of 73 days, calculate the length of the cash cycle. Explain the significance of this result.

5 Comparing accounts receivable turnovers

The following information is provided by the management of two smartphone retailers. Both businesses supply goods on 30 days' credit to regular customers.

	Android Unlimited	Smartphone Plus
	\$	\$
Accounts receivable balance as at 30 June 2027	16 500	22 800
Accounts receivable balance as at 30 June 2028	18 300	19 400
Cash sales for the year (excluding GST)	204 600	225 600
Credit sales for the year (excluding GST)	187 920	247 920

- Calculate the accounts receivable turnover in days. Write a brief comment on the businesses' collection procedures.
- Describe four steps management could take to improve accounts receivable turnover.

6 Age analysis of debts

The manager of Skyrainger Drones asks for your help with the accounts receivable of the business. The invoices sent to accounts receivable clearly state that the credit terms are 60 days. No discounts are offered for early payment. The following summary of the business's accounts receivable was drawn up at the end of October 2028.

AGE ANALYSIS OF ACCOUNTS RECEIVABLE

Total accounts receivable	0–30 days	31–60 days	61–90 days	91–120 days	121 days and over
\$42 500	\$3 400	\$29 750	\$4 250	\$2 975	\$2 125

The manager isn't overly concerned, because he has been told that most accounts receivable should be in the top of the age analysis table. As the business sells on 60 days' credit, he is happy that most accounts receivable are in the 0–60 days categories.

- Redraft the age analysis table by adding a percentage breakdown of each category.
- Comment on your percentage analysis, particularly in light of the manager's statement. Highlight any major concerns you have about the results.
- Recommend at least three changes this manager could make in terms of the way the business deals with accounts receivable. Explain in detail the reasons for your recommendations.



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7 Comparing age analyses

The following age analyses of accounts receivable are supplied by the management of Tieri's Tractor Parts.

AGE ANALYSIS OF ACCOUNTS RECEIVABLE AS AT 31 DECEMBER 2027

Total accounts receivable	0–30 days	31–60 days	61–90 days	91–120 days
\$17 800	\$12 460	\$3 560	\$1 246	\$534

AGE ANALYSIS OF ACCOUNTS RECEIVABLE AS AT 31 DECEMBER 2028

Total accounts receivable	0–30 days	31–60 days	61–90 days	91–120 days
\$19 600	\$14 700	\$4 312	\$392	\$196

- The business allows 30 days' credit to its customers.
- Credit sales for 2028 totalled \$220 000, including GST.
- Accounts receivable turnover was 43 days in 2027 and 41 days in 2026.

- Prepare an age analysis of accounts receivable for 2028 in percentage terms.
- Calculate the accounts receivable turnover for 2028.
- Referring to your answers to parts **a** and **b**, comment on management's effectiveness in collecting debts during the 2028 reporting period.



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8 Age analysis and turnover rates

Oxley's Printing Supplies allows 60 days' credit to its regular customers. During 2028 the business sold \$285 000 worth of goods on credit, plus GST. The management of the business provides the following details relating to accounts receivable at the end of the year, along with the equivalent details from the previous year.

AGE ANALYSIS OF ACCOUNTS RECEIVABLE AS AT 31 DECEMBER 2028

Total accounts receivable	0–30 days	31–60 days	61–90 days	91–120 days
\$44 800	\$23 000	\$16 200	\$5 150	\$4 500

AGE ANALYSIS OF ACCOUNTS RECEIVABLE AS AT 31 DECEMBER 2027

Total accounts receivable	0–30 days	31–60 days	61–90 days	91–120 days
\$49 200	\$23 500	\$12 400	\$10 960	\$2 340

The accounts receivable turnover rate for 2027 was 68 days.

- Calculate the accounts receivable turnover for 2028.
- Calculate an age analysis of accounts receivable for 2027 and 2028 to show the percentage of accounts receivable in each category.
- Comment on the success or otherwise of management's collection of debts over the last 12 months.

9 Accounts payable turnover

Bairnsdale Book Store had accounts payable of \$12 800 on 1 October 2027, while on 30 September 2028 they totalled \$14 400. Credit purchases for the year were \$156 000, plus GST. The business purchases its inventory on credit terms of 30 days.

- Calculate the accounts payable turnover.
- Comment on the performance of the business in meeting its commitments to its suppliers.

10 Comparing accounts payable turnovers

The owners of two mag wheel retailers provide the following information.

	Mags & Rims	Lowriders
	\$	\$
Accounts payable balance as at 31 December 2027	31 400	23 400
Accounts payable balance as at 31 December 2028	36 800	26 200
Cash purchases for the year (excluding GST)	123 400	112 800
Credit purchases for the year (excluding GST)	320 000	383 750
Credit terms of suppliers	30 days	30 days

- Calculate the accounts payable turnover for both businesses for 2028 and comment on the results.
- Suggest two reasons why accounts payable turnover may not comply with the credit terms offered by suppliers.

11 Trends in accounts payable turnover

Tony Arthurson, the owner of Footy Fever Superstore, is concerned about how long it's taking to repay some of his suppliers. Arthurson purchases all the inventory for his business on credit. He sometimes gets reminders about his credit accounts, but he needs actual data in order to understand what is happening in his business.

The following information is extracted from his final accounting reports for the last three years.

	2026	2027	2028
	\$	\$	\$
From the income statements:			
Cost of sales		88 000	92 000
From the balance sheets:			
Balance of inventory	25 400	28 300	32 200
Balance of accounts payable	4 900	5 900	7 100

- Reconstruct the Inventory account to determine the credit purchases the business made during 2027 and 2028.
- Calculate the accounts payable turnover for 2027 and 2028.
- Comment on the turnover results you have calculated in part **b**. Should Arthurson be concerned? Give reasons for your answer.



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12 Managing the cash cycle

The following information relates to Dalrymple Timber Supplies.

	1 January 2028	31 December 2028
	\$	\$
Inventory on hand	24 600	25 800
Accounts receivable balance	11 900	13 100
Accounts payable balance	12 500	14 400
Credit sales for the year (including GST)		181 500
Cost of goods sold for the year		131 040
Budgeted inventory turnover		60 days
Inventory turnover in 2027		72 days
Standard credit terms for accounts receivable		30 days
Accounts receivable turnover in 2027		32 days
Credit terms of suppliers		30 days

Note

All inventory purchases are made on credit.

- a** Calculate the inventory turnover and accounts receivable turnover for 2028.
- b** Determine the length of the cash cycle.
- c** Reconstruct the Inventory account to determine the credit purchases for 2028.
- d** Calculate the accounts payable turnover for 2028.
- e** Comment on the trend in the cash cycle and the success of the business in meeting its objectives with regard to the turnover of inventory and accounts receivable.
- f** Compare the cash cycle to the accounts payable turnover rate. Do you think the business is in any danger at the moment? Explain your answer fully.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

The following data relates to Toorak Tractor Supplies, a small business that buys all its inventory on credit terms of n/30.

	2026	2027	2028
Accounts payable turnover	5 days	27 days	19 days

- a Explain why the trend in the turnover rate may be seen as positive. (1 mark)
- b Explain why the trend in the turnover rate may be seen as negative. (1 mark)

Question 2 (4 marks)

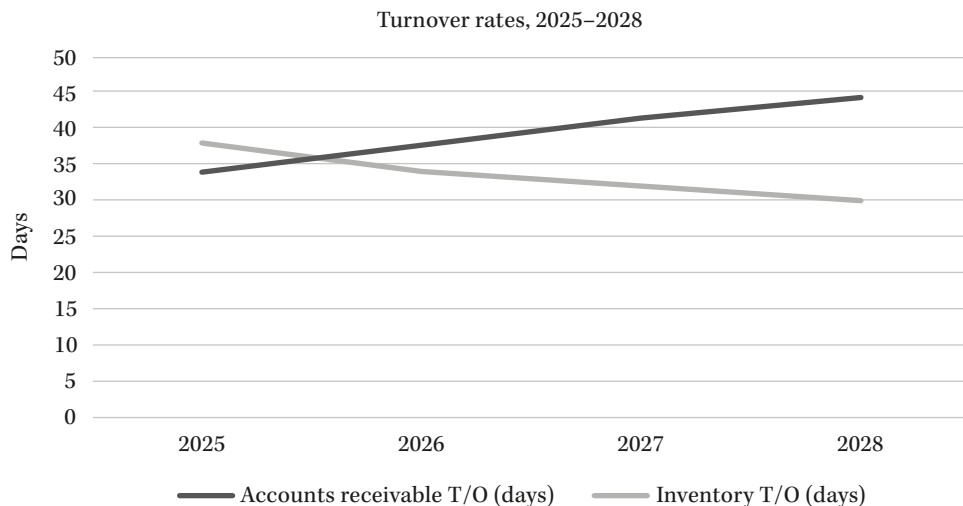
The owner of Classic Shoes is concerned about the time taken to collect debts from accounts receivable. She currently sells on credit terms of 1/14, n/30 and has provided the following data for your information.

	2026	2027	2028
Accounts payable turnover	25 days	35 days	42 days

State and explain two strategies the owner should adopt in order to improve the results shown above.

Question 3 (4 marks)

The following graph was created by Georgia Stevens, the owner of Brunswick Furniture.



Stevens is a little confused, as one friend has stated that her liquidity has improved over time, while another has suggested it has deteriorated over the four years.

Discuss the changes in the two turnover rates and comment on how the liquidity of this business has been affected.

CHAPTER 13



Bad and doubtful debts

KEY TERMS

Bad debt

Allowance for doubtful debts

In this chapter, you will learn about how bad and doubtful debts affect the income statement and the balance sheet. It is important that you know not just how to record a bad debt, but the accounting assumptions and qualitative characteristics that support this process.

Learning objectives

By the end of this chapter, you will be able to:

- **distinguish** between bad debts and doubtful debts [13.1]
- **explain** the need for an allowance for doubtful debts [13.1]
- **prepare** a general journal to create an allowance for doubtful debts [13.1]
- **prepare** a general journal entry to write off a bad debt [13.2]
- **prepare** an adjusting entry to record bad debts expense for a period [13.3]
- **explain** the link between the accounting assumptions and qualitative characteristics of accounting and bad and doubtful debts [13.3]

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 12: Management and accounting reports



Estimated time required: 1 week



13.1 What are bad and doubtful debts?



Whenever a trading business provides goods to a customer on credit, there is the risk it won't be paid for those goods. A business may check a customer's background and credit rating, but a reasonable risk may still become a problem.

Bad debts

A business can use email, telephone calls and reminder letters to remind slow-paying accounts receivable of their obligations. Sometimes they may even threaten legal action to get customers to pay. However, these tactics don't always succeed, and many businesses eventually face what is known as a bad debt. A **bad debt** is an account receivable that management accepts cannot (or will not) pay the amount that is outstanding.

This management decision may be due to legal advice from a solicitor representing the customer; for example, the solicitor may advise that the customer is bankrupt. Another possibility is when a customer cannot be located; people may move interstate (or overseas) to avoid their debts. Rather than spend hundreds or thousands of dollars chasing someone around the country (or the world), a business may choose to write off a relatively small debt as uncollectable.



bad debt an expense account created when an accounts receivable is written off as unable to be recovered

A bankrupt credit customer is likely to become a bad debt.

Doubtful debts

Under accrual accounting, 'profit' is defined as revenue earned less expenses incurred. When an income statement is prepared, revenue earned may include both cash and credit sales. Credit sales are usually recognised when goods have been provided to the customer and an invoice has been issued.

As you have seen, there is a risk that some of these credit sales may not be collected in the future. This raises the question of whether to report all credit sales in an income statement. As accountants are required to represent financial data *faithfully*, it would be wrong not to report the total credit sales earned in a given period. However, to acknowledge that there is some risk in relation to all the sales being collected in credit, it is common practice to create an **allowance for doubtful debts** at the end of a reporting period. This allowance recognises that there is a risk when selling goods on credit.

Once a business has been trading for a time, it may be able to identify a pattern of non-payment. For example, perhaps 5% of all credit sales are never collected from accounts receivable. If this pattern is established, management may apply this percentage at the end of each period to allow for some accounts to turn into bad debts in the future.

allowance for doubtful debts a negative asset account based on predictions of future bad debts

Recording bad and doubtful debts

If a business expects to have bad debts, it should recognise this on balance day, as this would more *faithfully represent* its true financial situation. It also creates an expense for the current reporting period, which acknowledges that management doesn't expect to collect all the amounts owing by accounts receivable.

EXAMPLE 13.1

The management of Tullamarine Trailers discusses bad debts at its monthly meeting.

Credit sales made during 2028	\$100 000
Percentage of credit sales usually not collected	5%

Management believes that this trend of uncollected accounts will continue, so an allowance for doubtful debts is created with the following general journal entry.

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec	Bad debts expense	5 000	
	Allowance for doubtful debts		5 000
	Adjusting entry to create allowance for doubtful debts at 5% of credit sales (Memo 76)		

The double entry to create an allowance for doubtful debts has a twofold effect on the final accounting reports:

- It creates a bad debts expense, which decreases the net profit for the period. Owner's equity thus also decreases in the balance sheet.
- The current assets of the business are indirectly decreased in the balance sheet, as the allowance for doubtful debts is deducted from accounts receivable as a negative asset.

If accounts receivable had a total amount owing of \$65 000 as at 31 December, it would be reported as follows.

Current assets	
Accounts receivable	65 000
Less: Allowance for doubtful debts	5 000
	<u>60 000</u>

When an allowance for doubtful debts is created, individual accounts receivable are not named. The allowance is simply based on a percentage of credit sales made during a period. The amount recognised should be as accurate as possible, in order to be true to the demands of *faithful representation*.

Bad debts are a fact of life for many businesses, so it is sensible to allow for this possibility in the period in which credit sales are reported. The potential losses created by future bad debts are a *relevant* expense to the users of accounting reports, and they should be reported at the end of each reporting period.

EXAM-STYLE QUESTION

The following information was provided by Erica Kershaw, the owner of Geelong Games & Puzzles, in relation to her trading results for 2028. (3 marks)

Credit sales:	\$52 000
Cash sales:	\$62 000
Balance of accounts receivable:	\$45 000
Sales returns:	\$4 000
Cost of sales:	\$48 000

Kershaw is concerned about the number of accounts receivable who are overdue with their payments. She has decided to create an allowance for doubtful debts equal to 4% of net credit sales and has recorded these details in Memo 29.

Prepare the general journal entry to create the allowance for doubtful debts on 31 December 2028.

Sample answer**GENERAL JOURNAL**

Date	Details	Dr	Cr
31 Dec	Bad debts expense	1920	
	Allowance for doubtful debts		1920
	Adjusting entry to create allowance for doubtful debts at 4% of net credit sales (Memo 29)		

Exam advice

Many final exams feature general journal entries. It's important to read the questions carefully, so that you have the correct data. In this question, the allowance is to be based on a percentage of net credit sales. Therefore, you can simply ignore the information about cash sales, cost of sales and the amount owing by accounts receivable. To determine the correct amount for the journal entry, simply deduct the sales returns (\$4000) from the credit sales (\$52 000). Always check the percentage to be used, as this will vary from question to question. Therefore, the calculation is 4% of \$48 000, which equals \$1920.

Don't base your calculation of the allowance for doubtful debts on the balance of accounts receivable. This is a common mistake students make. There is only one method used in the VCE course and that is to base the calculation on a percentage of net credit sales. No other method will be acceptable!





13.2 Writing off bad debts

After you have established an allowance for doubtful debts at the end of a reporting period, the next step is to write off a credit customer's account when it actually becomes a bad debt.

Example 13.1 showed that Tullamarine Trailers anticipates about \$5000 in bad debts in the next period. To demonstrate the complete process, the following two transactions are provided for the subsequent reporting period.

EXAMPLE 13.2

31 Mar Accounts receivable – Y Settle owes the business \$2200 and hasn't responded to countless emails and reminder letters. A debt collector attempted to collect the debt, but the business has been advised that this customer has disappeared interstate.

As management hasn't received any cash, it decides to write the account off as a bad debt.

GENERAL JOURNAL

Date	Details	Dr	Cr
31 Mar	GST clearing	200	
	Allowance for doubtful debts	2 000	
	Accounts receivable – Y Settle		2 200
	Account written off as bad debt (Memo 81)		

There are three components to this entry:

- The first step is to identify the GST component of the debt. As the total debt was \$2200, dividing this amount by 11 determines the GST amount charged at the time of sale: $\$2200/11 = \$200$. As the business would have collected the GST charged on this sale, it must be cancelled so that the business doesn't overpay the Taxation Office. A debit to the GST Clearing account is made to counteract the credit made to GST Clearing at the time of the sale.
- The remainder of the debt (i.e. \$2000) is debited against the balance of the Allowance for Doubtful Debts account. The business allowed for \$5000 in bad debts; this is its first bad debt for the period, but management's predictions are starting to come true!
- The third entry is the credit to the Accounts Receivable account. As that account had a balance of \$2200, this entry closes the account completely and Y Settle has now been removed from the books of this business.

Debt collection is the process of pursuing payments of money owed to a creditor. The debtors may be individuals or businesses.



EXAMPLE 13.3

15 Jun Tullamarine Trailers receives legal advice that one of its customers, IM Shiftee, has been declared bankrupt and is only paying 30 cents in the dollar on all his debts. The Accounts Receivable account for IM Shiftee shows that he still owes the business \$2750. The remainder of this account is to be written off as irrecoverable.

This results in the following general journal entries.

GENERAL JOURNAL			
Date	Details	Dr	Cr
15 Jun	Cash at bank	825	
	GST clearing	175	
	Allowance for doubtful debts	1 750	
	Accounts receivable – IM Shiftee		2 750
	Account written off as bad debt after receiving 30 cents in the \$ (Memo 81)		

Before writing off a customer as a bad debt, always check if they are paying a percentage of the amount owing in cash. Record this first!

This journal entry is similar to the one in Example 13.2, with one exception. As the customer is paying all debts at the rate of 30 cents in the dollar, the business will receive \$825 (30% of \$2750). Once the cash received is recorded, the rest of the process is exactly the same.

- The amount that remains owing is $\$2750 - \$825 = \$1925$. Divide this amount by 11 to determine the GST still owing: $\$1925 \div 11 = \$175$.
- Deduct the GST from the total still owing to determine the amount to be written off against the allowance for doubtful debts (i.e. $\$1925 - \$175 = \$1750$).
- By recording the cash received and making the adjustment to the GST Clearing account, the business achieves its goal of writing off the customer's account.

Add up the three entries on the debit side to ensure that the total amount owing has now been taken care of – in this case, $\$825 + \$1750 + \$175 = \$2750$.

13.3 Adjusting the Allowance for Doubtful Debts account



After writing off accounts receivable against the Allowance for Doubtful Debts account, the final step is to prepare this account for the subsequent period.

Continuing with Tullamarine Trailers, the Allowance for Doubtful Debts account would appear as follows.

ALLOWANCE FOR DOUBTFUL DEBTS					
		\$			\$
31 Mar	Accounts receivable: Y Settle	2 000	31 Jan	Balance	5 000
15 Jun	Accounts receivable: IM Shiftee	1 750			

The original estimate of future bad debts was \$5000, and this appears on the credit side of the account. Two different accounts became bad debts during the period, so the two amounts that were written off appear on the debit side.



We can now compare the estimate of bad debts and the actual bad debts incurred. The ledger account shows that, in this case, management's estimate of bad debts was a little high:

Prediction of future bad debts:	\$5000
Actual bad debts written off:	\$3750 (2000 + 1750)

The allowance is based on an estimated figure, so it's not expected to be perfect. Still, it's important to make as accurate an estimate as possible, because it has an impact on the profit reported for a given period.

If an estimate was high in one period, the adjustment made on balance day will automatically be adjusted for the following period. For example, if management wanted the allowance for doubtful debts to be maintained with a balance of \$5000, the account would look like the following example.

ALLOWANCE FOR DOUBTFUL DEBTS

		\$			\$
31 Mar	Accounts receivable: Y Settle	2 000	1 Jan	Balance	5 000
15 Jun	Accounts receivable: IM Shiftee	1 750	31 Dec	Bad debts expense	3 750
31 Dec	Balance	5 000			
		8 750			8 750
			1 Jan	Balance	5 000

BAD DEBTS EXPENSE

		\$			\$
31 Dec	Allowance for doubtful debts	3 750			

Despite the Allowance for Doubtful Debts account having a balance of \$5000, the actual expense for this period for bad debts is only \$3750. The estimate in the previous year was \$1250 too high. The anticipated bad debts were \$5000, yet the accounts written off were for only \$3750. Therefore, this is the amount to report in the income statement at the end of the period.

When management's prediction of bad debts is too high, they may decrease the balance of the Allowance for Doubtful Debts account. For example, if management decided to decrease the allowance to only \$4000, the accounts would be entered as follows.

ALLOWANCE FOR DOUBTFUL DEBTS

		\$			\$
31 Mar	Accounts receivable: Y Settle	2 000	1 Jan	Balance	5 000
15 Jun	Accounts receivable: IM Shiftee	1 750	31 Dec	Bad debts expense	2 750
31 Dec	Balance	4 000			
		7 750			7 750
			1 Jan	Balance	4 000

Estimated bad debts for the next reporting period.

BAD DEBTS EXPENSE

		\$			\$
31 Dec	Allowance for doubtful debts	2 750			

Bad debts expense written off for the current reporting period.

The figure reported for bad debts expense in this case is again \$1250 lower than the balance of the Allowance for Doubtful Debts account. This reflects the high estimate from the year before. The Allowance for Doubtful Debts account adjusts itself automatically, depending on whether a high or low estimate was made in the previous period.

The final step in the process of recording a bad debt is to close off the Bad Debts Expense account. As the Allowance for Doubtful Debts account is classified as a non-current asset, it is simply balanced and carried forward to the next reporting period. The Bad Debts Expense account must be closed off to the P&L Summary account in the usual way. Using the Bad Debts Expense account shown above as an example, the account would be closed off with a credit entry, as shown below in both the general journal and the general ledger account.

GENERAL JOURNAL

Date	Details	Dr	Cr
31 Dec	P&L summary	2 750	
	Bad debts expense		2 750

GENERAL LEDGER

BAD DEBTS EXPENSE

		\$			\$
31 Dec	Allowance for doubtful debts	2 750	31 Dec	P&L summary	2 750

Bad debts will then be reported in the income statement under the heading of 'Other expenses', along with the other expense items.

You should always keep in mind that the allowance for doubtful debts cannot satisfy the demands of *verifiability*. It's simply an estimate of future events. However, it does comply with *relevance*, because it recognises the potential for credit sales not to be collected. This may more *faithfully represent* the situation faced by a business, especially if it has a history of bad debts over a number of consecutive periods.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [13.1]** Whenever a trading business provides goods to a customer on credit, there is a risk of non-payment. A bad debt is an account receivable that cannot (or won't) pay the amount outstanding.
- [13.2]** An Allowance for Doubtful Debts account is created to reflect the possibility of bad debts. It provides an allowance based on estimates of the likely level of bad debts in a reporting period. Individual accounts receivable aren't named when an allowance for doubtful debts is created.
- [13.3]** The double entry to create an allowance for doubtful debts creates a bad debts expense, which leads to a decrease in net profit and owner's equity. The current assets of the business are indirectly decreased, as the allowance is deducted from accounts receivable.
- [13.3]** The allowance is based on an estimated figure, and therefore it isn't expected to be perfect. However, it's still important to make the allowance as accurate as possible.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Creating an allowance for doubtful debts

Jacob Hutchinson is the owner of Hutchie's Horse Gear, a small business that sells saddles, bridles and other horse-riding equipment. He has sold more than \$20 000 worth of goods on credit in the last 12 months but isn't certain that all of his credit customers will pay their accounts. His accountant has advised that he should create an allowance for doubtful debts of about 3% of his credit sales. This was noted in Memo 34. Total accounts receivable at the end of the period were \$5600.

- a Prepare the general journal entry required on 30 June 2028 to create an allowance for doubtful debts.
- b Show how to report accounts receivable, with the allowance for doubtful debts, in the balance sheet as at 30 June 2028.

2 Creating an allowance for doubtful debts

Sullivan's Shoes is owned and operated by Brooke Sullivan. She has provided the following information from her records as at 31 May 2028.

Cash sales for the year:	\$63 000
Credit sales for the year:	\$25 500
Sales returns from accounts receivable:	\$2 500
Balance of accounts receivable:	\$12 500

- a Prepare the general journal entry to create an allowance for doubtful debts equal to 2.5% of net credit sales (noted in Memo 87).
- b Prepare a balance sheet extract to show how accounts receivable would be reported as at 31 May 2028.

3 Writing off a bad debt

Eva Harrington is a credit customer of Northside Music & Beats. The business sold goods to her on 7 September 2027 for \$200, plus GST. She has never made a payment on her account. Northside's management has tried for several months to locate Harrington, but without success. On 30 June 2028, management decides to write off the debt as irrecoverable and this is noted in Memo 23. On balance day of the previous period, an allowance for doubtful debts of \$300 was created.

- a Prepare the general journal entry to write off Harrington's debt.
- b Prepare the following general ledger accounts: Accounts Receivable – Harrington, and Allowance for Doubtful Debts. Balance these accounts.



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4 Writing off a bad debt

A credit sale of \$480, plus GST, was made on 15 November 2027 to a company named Cheetem Pty Ltd. The customer has made no payment since that time. At the end of the previous period, on 31 December 2027, management decided to create an allowance for doubtful debts of \$600. The business has been informed by Cheetem's bank that the firm has collapsed and the owner can't be located. It's believed that he has disappeared interstate. All details were noted in Memo 121.

- Prepare the general journal entry to write off Cheetem's debt on 10 October 2028.
- Post your general journal entry to both the Accounts Receivable account and the Allowance for Doubtful Debts account in the general ledger.
- Outline the steps a business should follow before granting credit to customers.



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5 Bad debt with a cash receipt

The general ledger of Fitzroy Furniture included the following account.

ACCOUNTS RECEIVABLE - D PENDABLE

		\$			\$
31 Mar	Balance	770			

The owner of Fitzroy Furniture has just received legal advice that D Pendable has been declared bankrupt. The correspondence received also indicates that only 40 cents in the dollar will be paid to creditors and an EFT has been processed for this amount. Memo 312 notes all details regarding this payment. Total cash received from accounts receivable during March was \$14 000. The balance of the Accounts Receivable account at the start of March was \$21 000 and the Allowance for Doubtful Debts account had a credit balance of \$1000.

- Prepare the general journal entry to write off the D Pendable account, including the receipt of cash representing the payment of 40 cents in the dollar.
- Prepare the following general ledger accounts to show the receipt of cash from D Pendable and the bad debts entry: Accounts Receivable – D Pendable and Allowance for Doubtful Debts.
- State three tactics management may choose to adopt when an accounts receivable is overdue with a payment.



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6 Accounts receivable written off

The following information relates to S Case, a credit customer of Perfect Props.

12 July 2027	Credit sale of \$380, plus GST of \$38
14 August 2027	Credit sale of \$820, plus GST of \$82
31 December 2027	An allowance for doubtful debts of \$200 was created
17 April 2028	Cash receipt of \$110
31 December 2028	Legal advice received to the effect that S Case has been declared bankrupt. All debts are to be paid 20 cents in the dollar. A payment was received for 20% of Case's balance. The remainder of the account is to be written off as a bad debt (Memo 34).

- Prepare the Accounts Receivable – S Case account as it would appear in the general ledger of Perfect Props. The account should include all relevant entries from 12 July 2027 to 31 December 2028.
- In light of the above information concerning the S Case account, comment on the accuracy of the income statement that was prepared for Perfect Props for the year ended 31 December 2027.

7 Adjusting the allowance for doubtful debts

Montrose Exports has an accounts receivable on its books who has recently disappeared without trace. Memo 37 relates to this customer (named Scott Nodo) and gives the amount owing as \$660. Montrose Exports currently has an allowance for doubtful debts of \$500 in the general ledger, but it has decided to increase it to \$700 on 30 June 2028.

- a Using the general journal, prepare the entry required on 30 June 2028 to write off the amount owing by Scott Nodo as a bad debt.
- b Prepare the Allowance for Doubtful Debts account, including the entry to write off Nodo and the adjusting entry to increase the allowance to \$700.
- c Prepare the following general ledger accounts: Accounts Receivable – S Nodo and Bad Debts.

8 Adjusting the allowance for doubtful debts

The following transactions occurred between Encore Music Store and one of its credit customers, N Kelly. The business has allowed for future bad debts by establishing an allowance for doubtful debts of \$3500 on 30 June 2027.

Jul	3	Credit sale of musical instruments \$4200, plus GST of \$420 (cost price \$2150)
	9	Credit sale of musical equipment \$2700, plus GST of \$270 (cost price \$1230)
	15	Kelly made a payment on his account of \$550
	31	Legal advice was received from Kelly's solicitor advising Encore Music that its client has been declared bankrupt. All creditors of Kelly are to be paid 35 cents in the dollar. Memo 97 was completed to record all such details.

- a Using the general journal, prepare the entry required to write off Kelly as a bad debt on 31 July 2027.
- b Given that the Allowance for Doubtful Debts account has a balance of \$3500 on 30 June 2027, show how the account would look after Kelly's account was written off.
- c No other bad debts were experienced by the business in the year ended 30 June 2028. The business had net credit sales of \$250 000 in this period, and management has decided to adjust the allowance for doubtful debts to equal 2.5% of net credit sales. Prepare the adjusting entry required on 30 June 2028.
- d The accountant has stated that an allowance for doubtful debts should be maintained in order to comply with the demands of faithful representation. Do you agree? Explain your answer fully.



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9

Bad and doubtful debts

Geelong Scooterworld has just completed its first year of trading on 31 December 2027. During the year, the firm earned credit sales of \$102 000, with \$19 200 remaining unpaid on 31 December. It was decided to create an allowance for doubtful debts equal to 2% of credit sales.

On 30 November 2028, a credit customer, Kaput Ltd, was written off as a bad debt. This account had a balance of \$550 at the time. No other accounts receivable were written off during the year.

During 2028 the business had credit sales of \$120 000, and an allowance for doubtful debts of 1.5% of credit sales was required at the end of the period.

- a Prepare the adjusting entry to create the allowance for doubtful debts on 31 December 2027 and the relevant closing entry on that date.
- b Prepare a balance sheet extract to show how accounts receivable would be reported at 31 December 2027.
- c Prepare the Allowance for Doubtful Debts account, including entries for:
 - i the creation of the allowance on 31 December 2027
 - ii the writing off of the bad debt on 30 November 2028
 - iii the adjustment to the allowance for doubtful debts on 31 December 2028.
- d Comment briefly on the accuracy of the allowance for doubtful debts created on 31 December 2027.



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10

Bad and doubtful debts

The following information relates to the business of OK Go-Pro. The balance of the Accounts Receivable account at 31 December 2027 was \$25 000, and the balance of the Allowance for Doubtful Debts account was \$1200. During the year ended 31 December 2028, the following events are noted.

- Credit sales for the year amount to \$110 000.
 - Accounts receivable is expected to be about \$18 000.
 - Accounts receivable to be written off total \$1452 (including GST).
 - The allowance for doubtful debts is to be 1% of credit sales.
- a Prepare the Allowance for Doubtful Debts account as it would appear in the general ledger from 31 December 2027 to 31 December 2028.
 - b Prepare all relevant general journal entries in relation to bad debts and the allowance for doubtful debts during 2028.
 - c Explain how accounting for an allowance for doubtful debts complies with the demands of the qualitative characteristic of *relevance*.

11 Bad and doubtful debts

The management of All Things Analog has provided the following information.

BALANCE SHEET (EXTRACT) AS AT 30 JUNE 2027

Current assets	\$	\$
Accounts receivable	18 500	
Less: Allowance for doubtful debts	925	17 575

- a On 8 March 2028, a credit customer, F Chislett, was declared bankrupt. Prepare the general journal to write off the account balance of \$440.
- b On 18 June 2028, legal advice was received in relation to the account of Larry Lightfingers, who owed the business \$1210. An EFT for \$484 was processed as final payment, as only 40 cents in the dollar would be paid. Prepare the general journal entry to write off the account.
- c Management has decided to increase the allowance for doubtful debts to 1% of credit sales for the year ended 30 June 2028. Total credit sales amounted to \$164 000, with sales returns made by accounts receivable being \$2000 for the year. Prepare the adjusting entry required for this to take effect.
- d The business received notification that on 17 August 2028 accounts receivable S Banks has been declared bankrupt. The account, which had a balance of \$660, is to be written off. Prepare the appropriate journal entry.
- e Prepare a general journal entry to write off the account of B Nevan on 15 December 2028. The account had a balance of \$1650, and a payment of 30 cents in the dollar was received from Nevan's solicitor.
- f On 30 June 2029, it was decided to have an allowance for doubtful debts of \$1750. Prepare the adjusting entry required on this date.
- g Prepare the Allowance for Doubtful Debts account as it would appear in the general ledger of All Things Analog for the period 30 June 2027 to 30 June 2029.
- h State the amount that would be reported as bad debts expense for each of the years ended 30 June 2028 and 2029.
- i The owner of the business is concerned that the allowance for doubtful debts cannot satisfy the qualitative characteristic of verifiability and is considering not including it in his balance sheet. Do you agree? Discuss.

ETHICAL CONSIDERATIONS

Lee King is the owner of LK Tools, a trading business that provides tools and equipment to carpenters, plumbers and electricians. King provides credit to many of his customers, as most of his competitors also do the same and he doesn't want to miss out on sales.

Unfortunately, some of his biggest customers owe him a lot of money. He has employed a debt collection agency in the past, with mixed results. They have been successful in some cases, and King has paid them a fee of 2.5% of the debts collected. Other cases have been unsuccessful, and several accounts receivable have been written off as bad debts over the last few years.

Last weekend, King was at a social event where he discussed this issue with a few friends. One friend, who runs a panel-beating business, said that he has no problem collecting money from slow payers. The local motorcycle club runs a debt collection service that, according to King's friend, has a 100% success rate. The only issue is that their fee is 50% of the amount owing.



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- » As LK Tools currently has overdue debts totalling \$120 000, King is now giving some serious thought to using alternative methods of debt collection.
- Suggest three strategies that King could use to try to collect his outstanding debts before referring the matter to a debt collection agency.
 - Calculate the collection fees payable to the debt collection agency and the motorcycle club, given that accounts receivable currently owe King \$120 000.
 - Consider the alternatives available to King, and take into account the social, ethical and financial considerations of your decision. What would you do if you were in King's position? Explain your answer fully, discussing all elements of this issue.



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EXAM-STYLE QUESTIONS

Question 1 (4 marks)

David Hawking, the owner of Mornington Cycles, is concerned about a number of his slow-paying credit customers. In the period ending 30 June 2028, Hawking recorded credit sales of \$160 000 and cash sales of \$90 000.

He also noted that the business had a total of \$6000 in sales returns for the period. His accountant has advised that an allowance for doubtful debts should be created based on 1% of net credit sales.

- Prepare** the general journal entry to establish the Allowance for Doubtful Debts account on 30 June 2028. A narration is not required. (2 marks)
- One of Hawking's friends has suggested that an allowance for doubtful debts should not be created, as it is based on estimates and cannot be verified. It is therefore unreliable, he says, and profit will be distorted if he creates an allowance. With reference to a qualitative characteristic of accounting, **explain** why Hawking's friend is incorrect. (2 marks)

Question 2 (4 marks)

Warragul Whitegoods is a small business selling a range of household appliances. The following information has been provided by the manager of the business.

1 July 2027	Balance of Allowance for Doubtful Debts account \$7 480
30 June 2028	Accounts receivable balances to be written off as irrecoverable \$7 920
30 June 2028	Credit sales for the year \$180 000
30 June 2028	Balance of accounts payable \$32 800
30 June 2028	Sales return for the year \$3 600
30 June 2028	Allowance for doubtful debts to be 5% of net credit sales

Prepare the Allowance for Doubtful Debts account, including all relevant entries from 1 July 2027 to 30 June 2028.



» **Question 3** (7 marks)

The owner of Coburg Wholesale Cosmetics, Nadia Petrocco, created an allowance for doubtful debts of \$4000 on 31 December 2027. During the current period, one of her credit customers, Cosmetics Plus, has been declared bankrupt and is paying 25 cents in the dollar on all outstanding accounts. Petrocco has checked her general ledger accounts and Cosmetics Plus currently owes her \$8800. On 31 December 2028, she decides to write off this customer's account as a bad debt. Given this experience, Petrocco has also decided to increase her allowance for doubtful debts to a balance of \$4500.

- a Prepare** the general journal entry to write off Cosmetics Plus as a bad debt.
A narration is required. Details were recorded in Memo 53. (4 marks)
- b Complete** the Allowance for Doubtful Debts account, with all relevant entries as at 31 December 2028. (3 marks)

Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 14

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Cash flow statements

KEY TERMS

Cash flow statement
Cash
Cash equivalents
Cash flows from operating activities
Cash flows from investing activities
Cash flows from financing activities

In this chapter, you will learn about cash flow statements, the third accounting report prepared at the end of a trading period. These statements provide information about the movement of cash into and out of a business during a particular period of time.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** the role of the cash flow statement [14.1]
- **outline** the additional information revealed by a cash flow statement [14.1]
- **classify** cash flows into the areas of operating, investing and financing activities [14.2]
- **describe** the basic format of a cash flow statement [14.3]
- **prepare** a cash flow statement [14.3]
- **analyse** and interpret results as stated in a cash flow statement [14.4]
- **explain** how a cash flow statement can assist management decision-making [14.4]

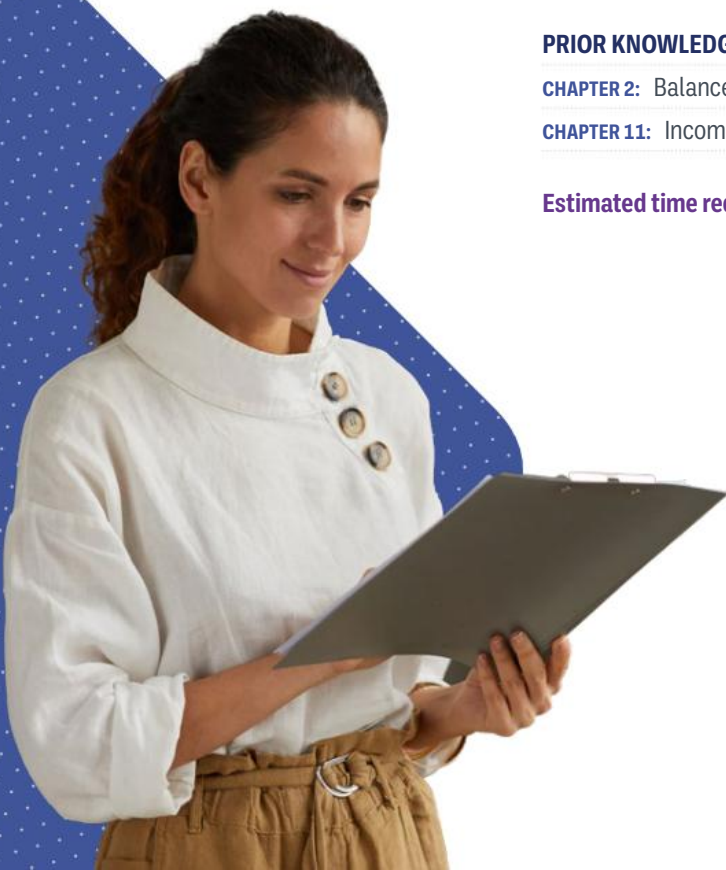
PRIOR KNOWLEDGE

CHAPTER 2: Balance sheets

CHAPTER 11: Income statements



Estimated time required: 1 week



14.1 The role of the cash flow statement



An income statement reports on revenues earned and expenses incurred and is prepared to determine a business's profit or loss over a particular period of time. A balance sheet provides a snapshot of the business's financial position on balance day. These are two of the main accounting reports, but they don't provide all the necessary information about a business. Businesses must also prepare a **cash flow statement**, which helps them to evaluate their cash management.

Together, the income statement, the balance sheet and the cash flow statement provide a summary of a business's operating performance and financial standing.

As the cash flow statement concentrates on movements of cash into and out of the business, it offers insights into the business that the other two key accounting reports don't provide. Specifically, it provides information about:

- the net cash inflows generated by trading operations
- the business's ability to meet its obligations to accounts payable and its bankers
- the business's long-term capital and debt arrangements
- cash flows resulting from investing in the non-current assets of the business.

A business must manage its cash resources to survive. It may earn a substantial profit, but this must result in cash inflows so that the business can pay its expenses, repay its loans and cover personal drawings by the owner. Therefore, the cash flow statement isn't simply a valuable report for external users. It also helps a business's management to gain all the relevant information about its activities.

cash flow statement

an accounting report used to show all inflows and outflows of cash during a reporting period, and the cash balance at the end of that period



Cash includes all cash on hand and any other cash equivalents a business holds.

cash all money on hand, plus cash equivalents

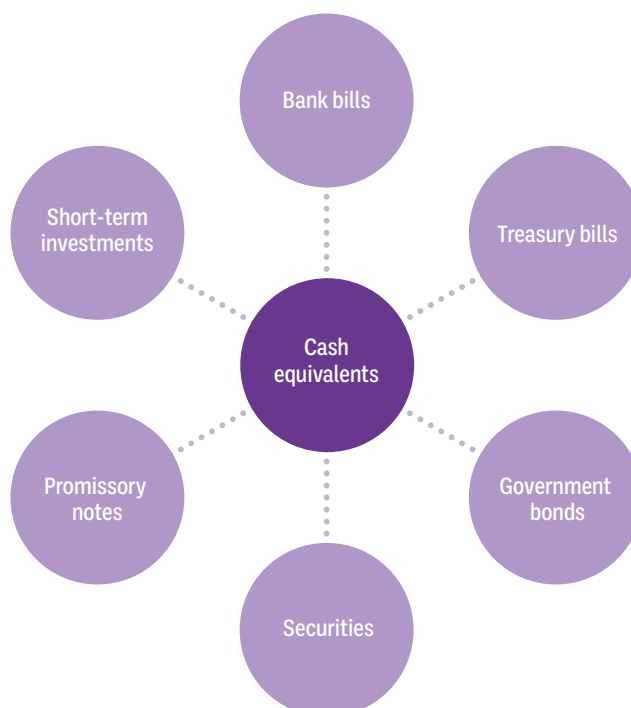
cash equivalents short-term liquid assets that can be quickly converted into cash

The concept of cash

In the cash flow statement, **cash** includes all cash on hand and any other cash equivalents held by a business. The definition of cash means cash on hand, cash at bank and cash held with non-banking financial institutions on an at-call basis.

Cash equivalents include items such as short-term cash deposits, bills receivable created by promissory notes, and other short-term investments such as bank bills and treasury bills. Such short-term items can include investments with a maturity date ranging from at-call up to two or three months into the future. Therefore, **cash equivalents** relate to liquid short-term assets. Figure 14.1 shows a number of possible cash equivalents.

Figure 14.1 Cash equivalents



As the cash flow statement examines changes in a business's cash position, it also covers short-term borrowings such as bank overdrafts. A business may have a fluctuating bank balance that drops into an overdraft position several times during a given period. Any review of its cash position should reflect the use of such short-term arrangements.

If a business reports an overdraft on balance day, it should include it under the definition of cash and cash equivalents. The only difference is that the business would treat the overdraft as a negative item when calculating total cash held.



14.2 Classification of cash flows

The accounting standards require that cash flows be reported under three main classifications: operating activities, investing activities and financing activities.

Cash flows from operating activities

cash flows from operating activities cash flows that result from the day-to-day operations of a business

Cash flows from operating activities are cash flows that result when a business provides goods and services as part of its day-to-day operations. Operating activities include many of the receipts and payments that would normally appear in a business's income statement. Examples are payments to employees, payments for goods and

services, and receipts from customers that result from the business supplying goods or providing services.

Some items in an income statement won't relate directly to cash flows. For example, depreciation of non-current assets doesn't involve a movement of cash and so it shouldn't be included in a cash flow statement. Also, an income statement prepared using the accrual method of accounting states revenues and expenses for a period, and these items don't necessarily relate to cash flows.

Credit transactions, accrued expenses and prepaid expenses listed as revenue earned or expenses incurred are different from the actual cash flows that occurred during the period. Therefore, a cash flow statement includes under its operating activities only the actual cash inflows and outflows that resulted from such revenue and expense items.

Cash flows from operating activities will include both the collection and payment of the Goods and Services Tax. Therefore, the GST collected on cash sales and paid on cash purchases and other payments is reported as an operating cash flow. If a business settles a GST liability owing from a previous month, or receives a GST refund from the ATO, it should also report these items in the operating activities section of the report.

Cash flows from investing activities

Cash flows from investing activities are those cash flows that result from purchasing or selling non-current assets. Investing activities include the purchase or sale of assets such as land and buildings, factory equipment and vehicles. It may also include long-term investments that don't qualify under the definition of cash or cash equivalents.

Again, keep in mind that only actual cash flows must be reported. When non-current assets are disposed of, book profits or losses aren't relevant. However, the value realised in cash represents a cash inflow and is therefore reported. Other long-term assets such as shares in other companies and debentures are also reported under the category of investing activities.

cash flows from investing activities cash flows that relate to the sale or purchase of non-current assets



Buying a non-current asset is considered an investing activity.

cash flows from financing activities cash flows that occur as a result of changes in the financial structure of a business

Cash flows from financing activities

Cash flows from financing activities are cash flows that have occurred when a business changes its financial structure. When evaluating the financial stability of a business, it is essential to consider how it is financed and the balance between the owner's funds and borrowed funds. A report on changes in financial structure will usually be of great interest to a business's prospective owners and lenders. Financing activities include capital contributions by the owner, the owner's withdrawals of cash, loans from external parties, and repayments of such loans.

Classifications of cash flows

The use of these three broad categories – operating activities, investing activities and financing activities – allows users of the cash flow statement to focus on specific areas within a business. The 'operating activities' classification focuses mainly on cash flows resulting from revenues and expenses, while the other two classifications cover the changes in items reported in the balance sheet. Investing activities highlight changes in the area of non-current assets, and financing activities look at how such assets were financed.

Table 14.1 summarises the types of cash flows that may be reported under each classification.

Table 14.1 Classifications of cash flows

OPERATING ACTIVITIES	INVESTING ACTIVITIES	FINANCING ACTIVITIES
Cash inflows from:	Cash inflows from:	Cash inflows from:
• selling goods for cash • cash collected from accounts receivable • commission received • interest received • GST received • GST refunds	• proceeds from the sale of non-current assets	• capital injections of cash • taking out loans
Cash outflows from:	Cash outflows from:	Cash outflows from:
• cash purchases of stock • payments to accounts payable • expenses paid • GST paid • GST settlements	• purchase of non-current assets for cash	• owner's cash drawings • loan repayments



14.3 Designing and preparing a cash flow statement



The accounting standards outline the basic format of the cash flow statement. Figure 14.2 demonstrates this format, which is based on the three classifications of cash flows: operating activities, investing activities and financing activities.

A subtotal is determined for each of these classifications. These subtotals highlight the net cash inflow or outflow that occurred within each activity during the reporting period. The report then shows the overall result of these cash flows in terms of an increase or a decrease in cash held over the period. This can be reconciled with the two cash balances as reported in the business's consecutive balance sheets.

Figure 14.2 Cash flow statement: Basic format

KILMORE ACTION SPORTS: CASH FLOW STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2028		
	\$ 1	\$
Cash flows from operating activities ←		
Cash sales	150 000	
Collections from accounts receivable	45 000	
GST collected	15 000	
Payments to accounts payable	(73 500)	
Rent	(25 000)	
Wages	(35 000)	
GST paid	(2 500)	
<i>Net cash provided by operating activities</i>		74 000
Cash flows from investing activities ←		
Sale of shop fittings	1 000	
Purchase of shop fittings	(5 000)	
<i>Net cash used in investing activities</i>		(4 000)
Cash flows from financing activities ←		
Loan from bank	10 000	
Loan repayments	(5 500)	
Drawings	(29 500)	
<i>Net cash used in financing activities</i>		(25 000)
Net increase (decrease) in cash held		45 000
Cash held at the beginning of the year		(12 000)
Cash held at the end of the year		33 000

Cash flows from the day-to-day trading activities.

Cash flows from buying and selling non-current assets.

Cash flows from changes in the financial structure.

- 1 Cash inflows are shown as positive amounts, and cash outflows are shown as negative amounts (indicated by brackets).
- 2 A summary (total) is shown for each of the three categories – operating, investing and financing cash flows.
- 3 The overall increase or decrease in the cash held by the business is calculated by totalling the three subtotals.
- 4 The final step is to include the cash held by the business at the start and end of the period.

Preparing a cash flow statement

A cash flow statement can be prepared from a summary of cash transactions or the statement of receipts and payments. A statement of receipts and payments can be used to provide a summary of all cash flow transactions for a period. It's simply a matter of classifying these cash flows under the headings of operating, investing and financing activities. Consider the following statement of receipts and payments.

**CRANBOURNE COOKWEAR:
STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30 JUNE 2028**

	\$	\$
Cash receipts		
Capital contribution	20 000	
Cash sales	50 000	
Collections from accounts receivable	10 000	
Sale of office equipment	2 000	
GST collected	5 000	87 000
Less: Cash payments		
Payments to accounts payable	30 000	
Advertising	3 000	
Wages	14 000	
Cleaning	3 000	
Drawings	10 000	
Purchase of computer	4 000	
Loan repayments	11 000	
GST paid	4 000	79 000
Excess of receipts over payments		8 000
Bank balance as at 1 July 2027		3 000
Bank balance as at 30 June 2028		11 000

The information in the statement of receipts and payments is then used to prepare a formal cash flow statement.

CASH FLOW STATEMENT FOR THE YEAR ENDED 30 JUNE 2028

	\$	\$
Cash flows from operating activities		
Cash sales	50 000	
Collections from accounts receivable	10 000	
GST received	5 000	
Payments to accounts payable	(30 000)	
Advertising	(3 000)	
Wages	(14 000)	
Cleaning	(3 000)	
GST paid	(4 000)	
<i>Net cash provided by operating activities</i>		11 000
Cash flows from investing activities		
Sale of office equipment	2 000	
Purchase of computer	(4 000)	
<i>Net cash used in investing activities</i>		(2 000)
Cash flows from financing activities		
Capital contribution	20 000	
Drawings	10 000	
Loan repayments	(11 000)	
<i>Net cash used in financing activities</i>		(1 000)
Net increase (decrease) in cash held		8 000
Cash held at the beginning of the year		3 000
Cash held at the end of the year		11 000

Cash outflows are listed in brackets, to indicate a negative cash flow.

Comparing these two accounting reports shows that a cash flow statement is simply a statement of receipts and payments where all the cash flows have been classified into the three distinct areas of operating, investing and financing.

The cash flow statement has the advantage of providing additional information about a business. For example, management can determine the extent to which its operating activities are generating cash, if any. An owner can see how much cash has been used up in financing the business or investing in its assets.

The cash flow statement is a valuable addition to the income statement and balance sheet, as it provides information not highlighted in those general purpose financial reports.

EXAM-STYLE QUESTION

A business owner buys a new computer for cash for \$3630, including GST. **Complete** the following table to show how this financial event would be reported in a cash flow statement.

(2 marks)

Item	Operating/investing/financing	Inflow or outflow	\$

Sample answer

Item	Operating/investing/financing	Inflow or outflow	\$
Computer	Investing	Outflow	3 300
GST paid	Operating	Outflow	330

Exam advice

When completing exam questions, don't be distracted by the number of lines provided in answer books. In the question above, three lines were provided for your responses, but only two items are to be listed as cash flows. Know the content well and prove to the assessors that you have knowledge of accounting. Also, you don't have to use all three headings of 'Operating', 'Investing' and 'Financing'. These three items are simply the choices available.

In questions that provide tables to be completed (as here), *don't* use an arrow to indicate an increase or a decrease. Use the headings provided! If the headings state 'Increase' or 'Decrease' (or perhaps 'Overstated' or 'Understated'), use these terms, not arrows. Also, *don't* use abbreviations such as 'Inv' for Investing or 'Op' for Operating. Always use full titles in this type of question.

14.4 Cash flows and decision-making



There isn't much point in preparing a cash flow statement for a business if you can't analyse the report fully and consider its results when making decisions about the future of the business.

As with other accounting reports, a cash flow statement can be compared with previous results. Such comparisons allow users of the report to identify changes and trends in the various activities. For example, management should investigate any

significant change in the cash provided by operating activities or changes in financial structure over consecutive reporting periods. Similarly, if a business is expanding over several years, the cash flow statements prepared for each period will show the additional investment in non-current assets.

In general, the cash flow statement provides management with information on the effects of its decision-making about cash resources. For this reason, cash flow statements for consecutive reporting periods are often prepared within the one report. This allows for easy comparison and highlights changes that have occurred within the business over time.

The following cash flow statements show how reporting periods can be compared.

**FORWARD FASHIONS:
CASH FLOW STATEMENT FOR THE YEAR ENDED 31 DECEMBER**

	2027		2028	
	\$	\$	\$	\$
Cash flows from operating activities				
Cash sales	200 000		240 000	
GST collected	20 000		24 000	
Cash purchases of inventory	(100 000)		(120 000)	
GST paid	(14 000)		(13 000)	
<i>Net cash provided by operating activities</i>		106 000		131 000
Cash flows from investing activities				
Sale of non-current assets	6 000			
Purchase of non-current assets	(40 000)		(10 000)	
<i>Net cash used in investing activities</i>		(34 000)		(10 000)
Cash flows from financing activities				
Loan repayments	(22 000)		(28 000)	
Proprietor's drawings	(40 000)		(50 000)	
<i>Net cash used in financing activities</i>		(62 000)		(78 000)
Net increase (decrease) in cash held		10 000		43 000
Cash held at the beginning of the year		3 000		13 000
Cash held at the end of the year		13 000		56 000

These cash flow statements provide a quick comparison of the changes in this business over a two-year period. The business increased its cash held from \$3000 at the beginning of 2027 to \$56 000 at the end of 2028, a very pleasing result!

The report can be used to explain how this improvement happened.

- Operating activities have provided an additional \$25 000 of cash inflows. This is a favourable result, and management should investigate the causes of such improvement and note them for the future.
- Management has continued the expansion in its non-current assets. Having committed \$40 000 to non-current assets in 2027, it allocated a further \$10 000 to investing activities in 2028.
- In the area of financing, the owner has increased the cash outflows for personal drawings but reduced the outflows for loan repayments.

Key changes such as these provide management with a range of information not provided by its income statements or balance sheets.

The cash flow statement gives an additional insight into the workings of the business and should be an integral part of an overall cash management strategy.



Practise and apply

14



REVISION: SUMMARY OF KEY CONTENT

- [14.1]** A cash flow statement provides information on the movement of cash into and out of a business during the reporting period. 'Cash' includes all cash on hand and any other cash equivalents (liquid short-term assets) held by a business.
- [14.2]** Cash flows are reported under three main classifications: operating activities, investing activities and financing activities.
- [14.3]** A standard cash flow statement reports against the three classifications, with a subtotal provided for each.
- [14.3]** A cash flow statement can be prepared from either a summary of cash transactions or a statement of receipts and payments.
- [14.4]** Management can analyse cash flow statements and consider the results when making decisions about the future of the business.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Cash flows from operating activities

Dom Sullivan, the owner of Sydney Road Fashions, has provided the following information about his business.

Receipts	\$	Payments	\$
Cash sales	60 000	Cash purchases of inventory	32 000
Collections – accounts receivable	20 000	Wages	19 000
Loan – Easy Bank	30 000	Advertising	5 000
GST collected	6 000	Drawings	16 000
		GST paid	3 700

- Using the relevant information from the table above, calculate the net cash provided by operating activities for the year ended 28 February 2028.
- Explain your treatment of drawings in your answer to part **a**.



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2 Cash flows from operating activities

Alan Bennetts extracted the following information from the books of his business, Fishing World.

	\$
Cash sales	60 000
Cash paid to accounts payable	25 000
Cost of sales	27 000
Wages	12 000
Advertising	3 000
Cash drawings	5 000
GST received from customers	6 000
GST paid to suppliers	2 800

- Calculate the net cash provided by operating activities for the year ended 31 March 2028.
- Explain your treatment of 'cost of sales' in your answer to part **a**.
- Explain why management should determine the net cash generated by operating activities in addition to calculating the net profit for a period.



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3 Cash flows from investing activities

The owner of McNamara's Music provided the following information about her business for the year ended 31 May 2028.

Receipts	\$	Payments	\$
Cash sales	62 000	Cash purchases of inventory	29 800
Sale of van	5 000	Purchase of computer	3 800
Sale of furniture	2 000	Purchase of fittings	4 900
GST collected	6 200	Drawings	9 700
		GST paid	3 870

- Calculate the net cash provided (or used) by investing activities for the year ended 31 May 2028.
- Justify your treatment of the purchases of inventory in your answer to part **a**.

4 Cash flows from investing activities

The following transactions occurred in the business of Lancefield Tractor Parts during the year ended 31 March 2028.

	\$
Cash collected from accounts receivable	32 400
Purchase of office equipment for cash	6 700
Profit on sale of computer	200
Cash purchase of fittings	5 400
Loss on sale of office furniture	300
Proceeds from sale of non-current assets	2 000
GST paid during the period	1 550
Purchase of furniture for cash	3 400
Cash drawings by the owner	5 600

Determine the net cash flow provided (or used) by investing activities.

5 Cash flows from financing activities

The following cash flows relate to the business of Angela's Leisurewear, owned and operated by Angela Bottari.

	\$
Profit earned for the year	40 000
Drawings made during the year	10 000
Cash sales for the year	36 700
Loan repayments made during the year	13 000
Credit sales for the year	34 300

- Prepare a schedule to determine the net cash provided (or used) by financing activities.
- Comment briefly on the business's financing activities, taking into account your answer to part a.

6 Cash flows from financing activities

The owner of Thomastown Tools has extracted the following details from the business's records for 2028.

	\$
Net cash from operating activities for the year	6 000
Net cash from investing activities	(10 000)
Capital injection by the owner	50 000
Loan repayments	5 000
Loans taken out during the year	65 000
Drawings by the owner: Inventory \$5000: Cash \$12 000	17 000

- Prepare a schedule to determine the net cash provided (or used) by financing activities.
- Comment briefly on the cash situation in this business, taking into account your answer to part a and the other information provided in the table.



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7 Cash flows: Full statement

The following is a summary of the cash transactions for March 2028 for the business of Drummond Street Drapery.

Receipts	\$	Payments	\$
Cash sales: selling price	5 030	Payments to accounts payable	2 300
Cash sales: cost price	2 585	Cash purchases of inventory	2 200
Receipts from accounts receivable	5 280	Advertising	400
Capital contribution	8 000	Purchase of equipment	4 500
Loan – NAB	9 000	Wages	2 000
Disposal of computer	1 600	Drawings	1 350
GST collected	503	Insurance	370
Total cash banked	29 413	Loan repayment	200
		GST paid	747
		Total cash paid	14 067

The Cash at Bank account balance as at 1 March 2028 was \$2510.

- Prepare a cash flow statement for Drummond Street Drapery for the month ended 31 March 2028.
- The cash flow statement can provide information not revealed by other accounting reports. What additional information is available to the owner of Drummond Street Drapery? Refer to details from part **a** in your answer.



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8 Cash flows: Full statement

The owner of Dylan's Disposal Store, which sells for cash and on credit, provided the following summary for his business for June 2028.

Cost of cash sales (Note: All inventory sold at 100% mark-up)	\$2 685
Receipts from accounts receivable (including discount expense of \$30)	\$880
Loan – EZ Finance	\$16 000
GST receipts	\$568
Commission revenue	\$310
Capital injection	\$5 000
Sale of van	\$5 600
Purchase of shop fittings	\$5 600
Cash purchases of inventory	\$1 850
Wages	\$2 540
GST settlement	\$2 100
Payments to accounts payable (including discount revenue of \$50)	\$2 650
Drawings by the owner (Note: Includes drawings of inventory that cost the business \$520)	\$1 720
Loan repayment	\$1 760
Purchase of computer	\$2 500
Advertising	\$1 900
GST payments	\$1 345
Cleaning expenses	\$1 600





On 1 June 2028, the business had an overdraft of \$1340.

- a Prepare a cash flow statement for the month of June 2028. Show clearly the cash flows from operating, investing and financing activities.
- b Comment on:
 - i the business's overall cash position
 - ii the level of cash generated by operating activities.

9 Cash flows: Full statement

The following report is submitted by Raff Gage, the owner of Pulsar Jetskis.

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31 MARCH 2028

	\$	\$
Cash receipts		
Cash sales	90 000	
Collections from accounts receivable	32 000	
Sale of delivery truck	5 500	
Capital	5 000	
Commission revenue	1 000	
Loan – K.S. Finance	13 000	
GST collected	9 100	155 600
Less: Cash payments		
Cash purchases of inventory	54 040	
Interest	1 660	
Advertising	6 450	
Cartage inwards	1 150	
Purchase of office equipment	12 300	
Wages – sales staff	32 060	
Loan repayments	4 700	
Drawings	17 900	
Purchase of delivery truck	23 000	
GST paid	9 694	162 954
Excess (deficit) of receipts over payments		(7 354)
Bank balance as at 1 April 2027		9 245
Bank balance as at 31 March 2028		1 891

- a Prepare a cash flow statement for Pulsar Jetskis for the year ended 31 March 2028.
- b The owner is concerned about the cash flows of their business. Comment on the results as revealed by your cash flow statement.



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10 Cash flows: Full statement

Michelle Templar, the owner of Specialist Computers, provided the following information in relation to her business.

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30 JUNE 2028

	\$	\$
Cash receipts		
Additional capital	12 000	
Proceeds from sale of office furniture	3 500	
Interest on government bonds	3 200	
Sales	65 200	
Accounts receivable	53 950	
Loan – NAB	22 600	
GST received	6 520	166 970
Less: Cash payments		
Proprietor's drawings	23 400	
Cartage outwards	1 150	
Accounts payable	62 330	
Interest expense	2 360	
Office salaries	15 600	
Cash purchases of inventory	8 500	
Repayments to NAB	4 650	
Advertising	2 100	
Shop wages	18 200	
Insurance	1 350	
Purchase of shop fittings	12 600	
GST paid	2 570	154 810
Excess (deficit) of receipts over payments		12 160
Bank balance as at 1 July 2027		4 860
Bank balance as at 30 June 2028		17 020

Inventory loss for the year was \$4100.

- Prepare a cash flow statement for Specialist Computers for the year ended 30 June 2028.
- Comment briefly on what your cash flow statement shows.

11 Consecutive cash flow statements

The owner of Lightbox Lasers prepares the following cash flow statements.

LIGHTBOX LASERS: CASH FLOW STATEMENTS FOR THE YEARS ENDED 31 DECEMBER

	2027		2028	
	\$	\$	\$	\$
Cash flows from operating activities				
Cash sales	140 000		150 000	
GST received	14 000		15 000	
Cash purchases	(60 000)		(50 000)	
Cash expenses	(40 000)		(40 000)	
GST paid	(11 500)		(9 800)	
Net cash provided by operating activities		42 500		65 200
Cash flows from investing activities				
Proceeds from sale of non-current assets	8 000		-	
Purchase of non-current assets	(15 000)		(8 000)	
Net cash used in investing activities		(7 000)		(8 000)
Cash flows from financing activities				
Repayments of loan	(10 000)		(10 000)	
Proprietor withdrawals	(22 000)		(22 000)	
Net cash used in financing activities		(32 000)		(32 000)
Net increase (decrease) in cash held		3 500		25 200
Cash held at the beginning of the year		7 000		10 500
Cash held at the end of the year		10 500		35 700

Comment on the changes that have occurred in the business of Lightbox Lasers as revealed in its cash flow statements. In your answer, consider the changes in the cash flows from operating, investing and financing activities.



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CASE STUDY

Kerry Norton, the owner of Norton's Bookshop, provides the following information for your consideration.

BALANCE SHEET AS AT 30 APRIL 2028

Assets	\$	Liabilities	\$
Cash at bank	3 240	Accounts payable	540
Inventory	45 400		
Display fittings	15 260	Owner's equity	
GST clearing	100	Capital	63 460
	64 000		64 000

The following is a summary of the key transactions for Norton's Bookshop in May 2028.

Summary of credit purchases		Summary of credit sales	
Inventory bought on credit	\$1 840	Inventory sold on credit	\$2 290
GST charged by suppliers	\$184	GST charged to clients	\$229
Total of invoices received	\$2 024	Total of invoices issued	\$2 519
		Cost of sales (credit sales)	\$1 200
Summary of cash receipts		Summary of cash payments	
Receipts from accounts receivable	\$1 725	Payments to accounts payable	\$1 200
Cash sales	\$1 460	Cash purchases of inventory	\$1 300
Capital contribution	\$8 000	Drawings	\$1 150
Bank loan	\$5 000	Wages	\$1 840
GST received on sales	\$146	Computer system	\$8 000
Total cash received	\$16 331	Loan repayment (monthly)	\$550
Cost of sales (cash sales)	\$680	GST paid	\$930
		Total cash paid	\$14 806
Other information		Other information	
Inventory gain	\$530	Drawings of inventory	\$500

- a Prepare the following general ledger accounts for the month of May 2028: Cash at Bank, Inventory, Accounts Payable, Accounts Receivable and GST Clearing. Balance each of these accounts.
- b Prepare the following general purpose accounting reports:
 - i income statement for May 2028
 - ii cash flow statement for May 2028
 - iii balance sheet as at 31 May 2028.



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EXAM-STYLE QUESTIONS

Question 1 (3 marks)

A trading business sold inventory for cash for \$5000, plus GST. The goods sold had a cost price of \$3500. On the same day, the owner withdrew \$1000 in cash, plus inventory that had a cost price of \$600. The GST Clearing account had a credit balance of \$2400 before these events took place.



» Complete the following table to show how to report these events in a cash flow statement.

Item	Operating/investing/financing	Inflow or outflow	\$

Question 2 (12 marks)

The owner of Berwick Carpets has provided the following information about the business.

	30 June 2027	30 June 2028
Inventory	\$92 000	\$95 000
Accounts receivable	\$12 000	\$16 000
Accounts payable	\$14 500	\$12 800
Loan – NAB	\$24 000	\$15 000

Other information for the year ended 30 June 2028:

Cash sales	\$200 000
Credit sales	\$240 000
Wages	\$98 000
Advertising	\$12 000
GST paid	\$1 200

- All inventory purchases were made on credit.
- All inventory items are marked up 100% to determine their selling prices.
- The business purchased a new computer for \$4000 cash during the year.

a Reconstruct the following ledger accounts: (7 marks)

- Inventory: to determine the credit purchases for the year
- Accounts Payable: to determine cash paid to suppliers
- Accounts Receivable: to determine cash received from credit customers

b Prepare an extract from the cash flow statement to show cash flows from operating activities for the year ended 30 June 2028. (5 marks)

Question 3 (3 marks)

A business owner has just had a pleasant surprise while discussing business performance with his accountant. Although his business has recorded a \$10 000 loss for the year, the business bank account has increased by \$22 000. **Explain** how this is possible, giving two examples that would help to explain this situation.







UNIT 4

Recording, reporting, evaluating and planning accounting information

The content in Unit 4 of the VCE Accounting course will be covered in the following chapters.

Chapter 15	Straight-line depreciation	292
Chapter 16	Reducing balance depreciation	307
Chapter 17	Buying and selling non-current assets	321
Chapter 18	Balance day adjustments: Part 1	339
Chapter 19	Balance day adjustments: Part 2	366
Chapter 20	Budgeting	385
Chapter 21	Budget variance reports	413
Chapter 22	Evaluation of business performance	425
Chapter 23	Additional performance indicators	449

CHAPTER 15



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Straight-line depreciation

KEY TERMS

Depreciation
Depreciation expense
Straight-line method of depreciation
Accumulated depreciation
Expired cost
Carrying value
Residual value
Useful life

In this chapter, you will learn about depreciation and how it is calculated and applied. You will also prepare journal entries to record depreciation of non-current assets.

Learning objectives

By the end of this chapter, you will be able to:

- **define** 'depreciation' [15.1]
- **explain** how depreciation complies with the period and accrual accounting assumptions [15.1]
- **explain** the meaning of the term 'cost' as it applies to non-current assets [15.1]
- **calculate** depreciation expense under the straight-line method [15.2]
- **prepare** a general journal entry to record the balance day adjustment for depreciation [15.3]
- **prepare** a general journal entry to close Depreciation expense accounts to the Profit and Loss Summary account [15.3]
- **explain** the functions of the Depreciation and Accumulated Depreciation accounts [15.3]
- **describe** the effect that depreciation has on an income statement and a balance sheet [15.4]

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 2: Balance sheets

CHAPTER 4: Double entry recording: An introduction

CHAPTER 11: Income statements



Estimated time required: 1 week



15.1 The meaning of 'depreciation'



An asset's effectiveness gradually diminishes over time. At the end of its useful working life, it may be scrapped, sold or traded in on a newer model. Because an asset suffers wear and tear from being used and may have become obsolete by the time it is disposed of, it's unlikely to return its original purchase price to the owner.

Depreciation is the allocation of the cost of a non-current asset over its effective working life. Non-current assets are those assets that a business expects to control for more than 12 months for the purpose of earning revenue. Depreciation spreads the cost of an asset over the period of time it is used to generate revenue.

The purpose of depreciation is to allocate as an expense the difference between the original cost of the asset and the amount it is likely to achieve at the end of its effective working life. This process may take several years, since only a portion of the cost is allocated during each year of the asset's life.

In compliance with the *period assumption*, the life of a business is divided into time periods. Revenue earned for a period is matched against the expenses incurred in that same period to determine an accurate profit. Non-current assets are used to generate revenue, but they also create some expenses for a business (e.g. repairs, registration and insurance). All relevant expenses should be included to determine an accurate profit figure for any given period.

Depreciation expense is created to account for a portion of the cost of an asset in each reporting period. In this way, the revenue an asset earns is considered in the same period as depreciation expense is recognised. This ensures that the profit recognised under the *accrual basis of accounting* is reasonably accurate.

depreciation the allocation of the cost of a non-current asset over its life

depreciation expense the amount of depreciation written off as an expense for one particular period

The cost of an asset

There are two elements to identify when measuring the cost of a non-current asset:

- its purchase price
- all other costs incurred to get the asset into a revenue-earning capacity.

Faithful representation requires that the information presented in relation to a non-current asset is complete and without bias. *Relevance* requires that all information that can affect managers' decision-making is reported.



Depreciation involves allocating the cost of an asset, such as a vehicle, over multiple periods.

The purchase price of a non-current asset can usually be *verified* by documentary evidence such as an invoice, an EFT transaction or a written contract. However, it isn't always easy to identify the other costs relating to the purchase of an asset. Sometimes a business has to pay for one-off expenses, such as the delivery or installation of an asset, before the asset is ready to earn revenue. In this case, the delivery and installation costs become part of the actual asset and the *total amount* is considered for depreciation.

The following examples illustrate this situation.

EXAMPLE 15.1

A business buys a new vehicle for \$20 000 cash and pays the items listed in the table.

Government stamp duty	\$1000
Dealer's delivery charges	\$500
Insurance and registration	\$800 per annum

The cost of the vehicle consists of the purchase price of \$20 000, plus the stamp duty of \$1000 and the dealer's charge of \$500: a total of \$21 500.

All of these items become part of the cost of the vehicle because they must be paid in order to get the vehicle in a position to earn revenue. Once these items have been paid, they don't occur again – proof that they are related to the actual purchase of the asset.

However, the insurance and registration cost is a different matter. This amount isn't included in the cost of the vehicle because it isn't paid to get the asset into a revenue-earning capacity. Furthermore, it is payable every year if the business owner chooses to renew the insurance policy and registration. Therefore, it is seen as a separate expense item.

EXAMPLE 15.2

A business buys a new computer for \$10 000 and pays for the items listed in the table.

Installation	\$2000
Service contract	\$200 per annum

In this example, the cost of the computer is \$12 000. The installation cost of \$2000 must be paid in order to get the asset into a revenue-earning capacity, so it becomes part of the cost of the asset.

The service contract doesn't have to be paid before the asset is usable. It is payable each year if management chooses to continue it.



15.2 The straight-line method of depreciation

straight-line method of depreciation a method of depreciation that allocates the same amount of depreciation every reporting period, regardless of the age of the asset

There are several different ways of calculating depreciation, but the VCE Accounting course only requires you to know about two methods. The first of these is the straight-line depreciation method, which is the simplest. The second is the reducing balance method, which you will learn about in Chapter 16.

The **straight-line method of depreciation** allocates the same amount of an asset's cost each period. It is also called the fixed instalment method because the amount of depreciation is fixed, regardless of whether the asset is in its first or final year of use.

Consider the details in the table, which relate to a vehicle bought by Faulkner's Fine Foods on 1 July 2028.

Purchase price of van	\$32 000
Estimated useful life	4 years
Estimated residual (scrap) value	\$12 800

The formula used to calculate depreciation under the straight-line method is:

$$\text{Depreciation per annum} = \frac{\text{Cost} - \text{Residual value}}{\text{Useful life}}$$

In the example of Faulkner's Fine Foods, the equation becomes:

$$\begin{aligned} \text{Depreciation per annum} &= \frac{\$32\,000 - \$12\,800}{4} \\ &= \frac{\$19\,200}{4} \\ &= \$4\,800 \end{aligned}$$

This calculation indicates that \$4800 of the cost of the vehicle will be written off as depreciation in each of the four years the van is used in the business. Over those four years, a total of \$19200 will be written off, leaving only the expected 'scrap value' of \$12800 (i.e. \$32000 - \$19200 = \$12800).

The depreciation expense can also be expressed as a percentage rate per annum. In this case, the depreciation rate is calculated as follows:

$$\frac{\text{Depreciation per annum}}{\text{Cost of the asset}} = \frac{\$4\,800}{\$32\,000} = 0.15 \text{ or } 15\%$$

This percentage rate indicates that 15% of the cost of the asset will be written off each year throughout its expected life.

15.3 The adjusting entry for depreciation



Depreciation is usually allocated on the last day of each period and is therefore called a balance day adjustment. (Balance day adjustments are covered in detail in Chapter 18.) Each period, an adjusting entry is required to introduce the amount of depreciation to be written off.

Looking back to Faulkner's Fine Foods, the vehicle was purchased on 1 July 2028. If the reporting period ends on 30 June each year, the first adjusting entry to record the depreciation of the van is shown in Figure 15.1.

Figure 15.1 General journal entry to record depreciation

GENERAL LEDGER

GENERAL JOURNAL			
Date	Details	Dr	Cr
30 Jun 2029	Depreciation of vehicle	4 800	
	Accumulated depreciation of vehicle		4 800

accumulated depreciation

the total amount of depreciation that has been written off from the date the asset came under the control of the business until the present time

The debit entry to the Depreciation of Vehicle account is required because depreciation is an expense item. Therefore, the above entry increases the expense account for depreciation.

The credit entry to Accumulated Depreciation of Vehicle is an increase in a negative asset account. As its name suggests, the **Accumulated Depreciation** account is used to accumulate or add up the total depreciation written off an asset so far. It is known as a negative asset account because it's deducted from the related asset account (i.e. Vehicle) in the balance sheet.

When posted to the general ledger accounts, this journal entry results in the following entries.

DEPRECIATION OF VEHICLE					
		\$			\$
30 Jun 2029	Accumulated depreciation of vehicle	4 800			
Depreciation is an expense account. Accumulated depreciation is a negative asset account.					
ACCUMULATED DEPRECIATION OF VEHICLE					
		\$			\$
			30 Jun 2029	Depreciation of vehicle	4 800

As the Depreciation of Vehicle account is an expense, it is closed off to the Profit and Loss Summary account on balance day along with all other expenses.

Using this data, the related closing entry would be recorded in the general journal as shown in Figure 15.2.

Figure 15.2 General journal entry to close a depreciation account

GENERAL LEDGER			
Date	Details	Dr	Cr
30 Jun 2029	P&L summary	4 800	
	Depreciation of vehicle		4 800
	Closing entry		

When the closing entry is posted to the general ledger, the accounts appear as follows.

DEPRECIATION OF VEHICLE					
		\$			\$
30 Jun 2029	Accumulated depreciation of vehicle	4 800	30 Jun 2029	P&L summary	4 800
ACCUMULATED DEPRECIATION OF VEHICLE					
		\$			\$
			30 Jun 2029	Depreciation of vehicle	4 800

Note that the Depreciation and Accumulated Depreciation accounts are *totally different* in nature. As the Depreciation account is an expense account, it is closed off at the end of each period and returned to a zero balance on balance day. The Accumulated Depreciation account, being a negative asset account, is balanced each period, with the balance carried forward to the following period.

Continuing with this example, the accounts have been redrafted to illustrate the ledger entries after two periods have passed.

DEPRECIATION OF VEHICLE					
30 Jun 2029	Accumulated depreciation of vehicle	4 800	30 Jun 2029	P&L summary	4 800
30 Jun 2030	Accumulated depreciation of vehicle	4 800	30 Jun 2030	P&L summary	4 800

Annual depreciation expense is closed off to the P&L Summary account.

ACCUMULATED DEPRECIATION OF VEHICLE					
		\$			\$
			30 Jun 2029		4 800
30 Jun 2030	Balance	9 600	30 Jun 2030		4 800
		9 600			9 600
			1 Jul 2030		9 600

Total depreciation is written off after two years.

Exceptions to the depreciation rule

Under the straight-line method, the amount recorded as depreciation is the same each period. The depreciation expense is closed off to the Profit and Loss Summary account each year. The Accumulated Depreciation account simply adds on the period’s depreciation to that amount already depreciated in previous reporting periods. However, there are two circumstances where the amount of depreciation entered on balance day may vary.

The first exception is when the reporting period is less than a year. For example, a business owner may report monthly or quarterly. As straight-line depreciation is based on the actual time expired, simply divide the annual depreciation expense into smaller periods.

For Faulkner’s Fine Foods, the vehicle was being depreciated at the rate of \$4800 per year. If the reporting period was half a year, the depreciation to be allocated should be half of this amount: \$2400. If the business reported quarterly, only \$1200 would be allocated each quarter ($\$4800/4$); for monthly reporting, it would be \$400 ($\$4800/12$).

The second complication may be that a business purchases an asset *during* the reporting period, rather than right at the start of the period. Once again, simply work out how long the asset has been under the control of the entity and how much depreciation is relevant to that time period.



Check how long an asset has been under the control of the entity before calculating depreciation.

In the case of Faulkner's Fine Foods, the van was purchased on 1 July and balance day was 30 June, so a full year's depreciation was allocated. However, if the vehicle was purchased on 1 April, only three months would have expired by balance day. Thus, depreciation would only be for three months, or a quarter of the full year's amount. Therefore, when calculating depreciation, always check two details:

- the length of the reporting period
- how long the asset has actually been under the control of the entity.

Determine the annual depreciation expense, then adjust this amount for either of these two circumstances if necessary.



15.4 Depreciation and the balance sheet

Depreciation (an expense item) has a twofold effect on the balance sheet of a business:

- It decreases profit and therefore reduces the owner's equity at the end of the period.
- It reduces the amount shown for the asset in the balance sheet on balance day.

Figure 15.3 demonstrates how to present the details relating to the vehicle owned by Faulkner's Fine Foods.

Figure 15.3 Balance sheet (extract) as at 30 June 2029

Non-current assets	
Vehicle	\$32 000
Less: Accumulated depreciation	4 800
	27 200

The dollar values shown in Figure 15.3 represent the following details:

- The \$32 000 is the purchase price of the asset, plus any other costs incurred in getting the asset into a revenue-earning capacity, such as stamp duty and dealer's delivery charges. Therefore, the total of \$32 000 faithfully represents the cost of the vehicle to the entity. This figure is always shown in the balance sheet as long as the asset is under the control of the business.
- The \$4800 shown as accumulated depreciation is the total amount of depreciation allocated from the day the asset was first purchased up until the date of the report. This figure (also called the **expired cost** of the asset) increases each reporting period.
- The \$27 200 is made up of two components: the value of the asset yet to be depreciated and the asset's estimated residual value. This amount is also called the book value or **carrying value**. 'Carrying value' is the preferred term, as it indicates the cost of the asset still being carried by the business, as distinct from the asset's original cost. It may also be referred to as the written-down value or unexpired cost of the asset. As more depreciation is written off over the years, the accumulated depreciation of an asset increases and its carrying value decreases.

expired cost the value of a non-current asset that has already been written off as depreciation

carrying value the original cost of an asset less accumulated depreciation

Over the useful life of the asset, Faulkner's vehicle would be reported in the balance sheets as follows.

BALANCE SHEETS (EXTRACTS) AS AT 30 JUNE

	2029	2030	2031	2032
<i>Non-current assets</i>	\$	\$	\$	\$
Vehicle	32 000	32 000	32 000	32 000
Less: Accumulated depreciation	4 800	9 600	14 400	19 200
	27 200	22 400	17 600	12 800

The cost of the asset remains the same as the years go by.

The accumulated depreciation increases every period.

Note that the original cost of the vehicle is reported in each balance sheet throughout the asset's life. Rather than adjust the cost price of the asset, the accumulated depreciation increases by the amount of depreciation charged each year (\$4800). This causes a corresponding decrease in the carrying value of the asset as each year passes.

EXAM-STYLE QUESTION

On 1 May 2028, Kiara O'Brien purchased new display equipment for her shoe shop, Boots 'n' All. The equipment cost her \$9130, including GST. She estimates that she will use the equipment for about five years and that it will have a residual value of \$500.

(5 marks)

- Prepare the general journal required on 30 June 2028 to record the depreciation of the display equipment. A narration is not required.
- Prepare a balance sheet extract showing how the display equipment would be reported on 30 June 2029.

Sample answer

a

GENERAL JOURNAL

Date	Details	Dr	Cr
30 Jun 2028	Depreciation of display equipment	260	
	Accumulated depreciation of display equipment		260

Depreciation is \$1560 for a full year: therefore, \$260 for two months.

b

BALANCE SHEET (EXTRACT) AS AT 30 JUNE 2029

<i>Non-current assets</i>	
Display equipment	\$8 300
Less: Accumulated depreciation	1820
	6 480

The accumulated depreciation in this response includes \$260 depreciation for 2028 and \$1560 depreciation in 2029. Total accumulated to date: \$1820.

Exam advice

When reading questions on depreciation, always check carefully the date that the business purchased the asset, as well as the date of balance day. Read all dates carefully. The above question follows the pattern of many past exam questions when the balance day adjustment is for one year (in this case, 2028), but then the balance sheet is for one year later (2029). Whenever this type of question is used, many students will do the adjusting entry and then transfer the amount of depreciation to the balance sheet extract, not realising that it is for a different reporting period.

Don't take short-cuts when it comes to depreciation. Use full titles in the general journal. For example, there is usually ample space to write 'Depreciation of display equipment' in your journal entry. Don't abbreviate it and write 'Depreciation expense' or 'Dep'n equipment'. These are unacceptable abbreviations and will be assessed as incorrect titles. Short-cuts will cost you marks!

Depreciation and the income statement

As depreciation is an expense item, it is closed off to the Profit and Loss Summary account in the general ledger. It is also reported in the income statement when final reports are being prepared. As depreciation is an expense, it is clearly a *relevant* item in relation to the demand that an accurate profit is determined for the period.

However, there is also the demand for all information to be *verifiable* – information should be supported by evidence. This creates the possibility of a conflict between these two qualitative characteristics. As depreciation is based on two estimates (for both **residual value** and **useful life**), the amount written off each year may be questionable, as it cannot be verified by documentary evidence. However, this is usually considered acceptable, because it is outweighed by the demand that all relevant expenses be included in the income statement.

While it is often difficult to predict future residual values after years of use, it's better to have an estimated amount written off as depreciation, rather than not include depreciation in the income statement at all. The demands of relevance outweigh the concern of not being able to satisfy verifiability.

residual value the amount an asset is expected to realise at the end of its useful life when it is sold, traded in or scrapped

useful life the period of time that a business expects to use a non-current asset for the purpose of earning revenue

.....
An asset will have residual value when it is sold, traded in or scrapped.





Practise and apply

15



REVISION: SUMMARY OF KEY CONTENT

- [15.1]** Depreciation is the allocation of the cost of a non-current asset over its effective working life. The cost is spread over the period of time the asset is used to generate revenue.
- [15.1]** Depreciation follows the period assumption, as the life of a business is divided into periods of time and the asset's value is spread across those periods. It also follows the accrual accounting assumption, as the depreciation incurred for a period is matched against the revenue earned in that same period.
- [15.1]** The cost measured for a non-current asset includes both the asset's purchase price and all other costs incurred in getting the asset into a revenue-earning position.
- [15.2]** The straight-line method of depreciation allocates the same amount of an asset's cost each period. It is also called the fixed instalment method because the amount of depreciation is fixed, regardless of whether the asset is in its first or final year of use.
- [15.3]** Depreciation is recorded in the Depreciation account as an expense. It is closed off to the Profit and Loss Summary account on balance day.
- [15.3]** The Accumulated Depreciation account is used to accumulate or add up the total depreciation written off an asset so far. As a negative asset account, it is balanced each period, with the balance carried forward to the following period.
- [15.4]** As depreciation is an expense item, it decreases profit and owner's equity at the end of the period. The effect on balance day is to reduce the amount shown for the asset in the balance sheet. The expense is also reported in the income statement when final reports are prepared.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Calculating depreciation

Ben Wilson is the owner of Wilson's Wheels, a small business that specialises in tyres and alloy wheels. On 1 July 2028, Wilson purchased a photocopier for his business office at a cost of \$15 000. The manufacturer also charged Wilson \$1000 for installing and setting up the machine. The accounting period for Wilson's Wheels ends on 31 December each year. Wilson estimates that the photocopier will have a useful life of about three years, after which he expects to sell it for approximately \$4000.

- Calculate the depreciation expense to be charged per annum under the straight-line method of depreciation.
- How much depreciation expense would Wilson write off for the years ended 31 December 2028, 2029 and 2030?
- Prepare balance sheet extracts to show how Wilson would report the photocopier as at 31 December 2028, 2029 and 2030.



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2 Determining the cost of a non-current asset

Collingwood Cactus World purchases a new computer system on 1 April 2028. The following information relates to this computer:

Purchase price	\$4920
Maintenance contract	\$120 per annum
Insurance	\$150 per annum
Installation	\$80

The owner estimates that she will use the computer in the business for three years and then sell it for about \$1100.

- Calculate the total cost of the asset that should be considered for depreciation.
- In your answer to part **a**, did you exclude any items from the list of payments stated above? If so, explain how you would treat these items in the accounting reports of the business.
- Using the straight-line method of depreciation, calculate the depreciation expense per annum.
- Express the depreciation per annum as a percentage of the cost of the asset.
- Prepare the adjusting entry for depreciation in the general journal on 31 March 2029.



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3 Journal entries for depreciation

Footscray Fireplaces purchased a delivery van on 1 June 2028 for \$19 000. It also paid the dealer's charges and stamp duty totalling \$2000, and registration and insurance of \$900 for 12 months' cover. The van's estimated useful life is four years and estimated residual value is \$6600.

- Calculate the annual depreciation expense to be written off under the straight-line method.
- Prepare the general journal entry to record the depreciation expense on the balance days of 30 June 2028 and 30 June 2029.
- Prepare the closing entries relevant to depreciation on 30 June 2028 and 2029.
- Post the entries prepared in parts **b** and **c** to the relevant general ledger accounts.
- Prepare an extract of the balance sheet to show the reporting of the delivery van as at 30 June 2028 and 2029.

4 Journal entries for depreciation

Rex Payne is the proprietor of Terrarium Rex, a store selling terrariums and associated gear. On 1 July 2028, he purchased new shop fittings for \$12 000 cash. He decided to depreciate the fittings at 20% per annum, using the straight-line method. The books of the business are closed on 31 December each year.

- a Prepare the necessary adjusting and closing entries for depreciation of the shop fittings for the years ended 31 December 2028, 2029 and 2030.
- b Prepare the following general ledger accounts for the period 1 July 2028 to 31 December 2030:
 - i Shop Fittings
 - ii Depreciation of Shop Fittings
 - iii Accumulated Depreciation of Shop Fittings.
- c Show how the shop fittings would be shown in the balance sheet as at 31 December 2028, 2029 and 2030.
- d Explain how depreciation ties in with the demands of the qualitative characteristic of relevance.

5 Ledger accounts for depreciation

Louise Kurkowski is the proprietor of LK's Pinball Tables. On 1 November 2028, she purchased \$6520 of new office equipment. The equipment has an expected useful life of four years, after which it will be sold. The anticipated residual value is \$2200. The business closes its books on 30 June each year.

- a Using the straight-line method of depreciation, calculate the annual depreciation expense.
- b What is the expense for depreciation of office equipment for the year ended 30 June 2029?
- c Prepare the following general ledger accounts for the period 1 November 2028 to 30 June 2030:
 - i Office Equipment
 - ii Depreciation of Office Equipment
 - iii Accumulated Depreciation of Office Equipment.
- d Show how the asset Office Equipment would be reported in the business's balance sheet on 30 June 2029, 2030 and 2031.

6 Depreciations and reports

Bellarine Bedding purchased a new delivery van on 1 April 2028 for \$18 600. To improve the van's handling on dirt roads, a better suspension system was installed as a permanent fixture in the vehicle. The suspension system and its installation cost a total of \$2400. The business uses the straight-line method to depreciate its assets. It plans to use the van for three years and then trade it in on a newer model. The trade-in allowance is expected to be approximately \$6000.

- a Explain, and justify, how you would treat the cost of \$2400 for the suspension system.
- b Calculate the annual depreciation expense of the delivery van.
- c In relation to the van, how much depreciation expense should appear in the income statement for the year ended 30 June 2028?
- d Prepare the required adjusting and closing entries for the depreciation of the van for the years ended 30 June 2028, 2029 and 2030.
- e Prepare extracts of the business's balance sheet to show how the delivery van would be reported as at 30 June 2028, 2029 and 2030.



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7 Interpreting depreciation entries

Tom Smyth is the owner of Gippsland Salami Merchants. He uses the straight-line method of depreciation and has provided the following accounts from his general ledger.

VEHICLE

		\$			
1/3/28	Cash at bank				

DEPRECIATION OF VEHICLE

		\$			\$
30/6/28	Accumulated depreciation of vehicle	2 240	30/6/28	P&L summary	2 240

ACCUMULATED DEPRECIATION OF VEHICLE

		\$			\$
			30/6/28	Depreciation of vehicle	2 240

- What is the annual depreciation expense being allocated from the cost of this vehicle?
- What percentage of the asset's cost is being written off per annum?
- What will be the balance of accumulated depreciation on 30 June 2030?
- Prepare balance sheet extracts to show how the vehicle would be reported as at 30 June 2029, 2030 and 2031.
- Smyth plans to use the vehicle in his business for four years. What was his original estimate of the vehicle's scrap value?



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8 Interpreting depreciation entries

The following information is extracted from the books of Fanboy Frenzy Collectables.

GENERAL LEDGER

SHOP FITTINGS

		\$			
1/7/27	Cash at bank	16 000			

DEPRECIATION OF SHOP FITTINGS

		\$			\$
31/12/27	Accumulated dep'n of shop fittings*	1 400	31/12/27	P&L summary	1 400
31/12/28	Accumulated dep'n of shop fittings	2 800	31/12/28	P&L summary	2 800

ACCUMULATED DEPRECIATION OF SHOP FITTINGS

		\$			\$
			31/12/27	Dep'n of shop fittings	1 400
31/12/28	Balance	4 200	31/12/28		2 800
		4 200			4 200
			1/1/29	Balance	4 200

*This is one exception where you won't be penalised for using an abbreviation. The space provided in ledger accounts in the exam booklet is limited and it's impossible to write the full title.





- a What is the original cost of the shop fittings owned by Fanboy Frenzy?
- b What is the annual depreciation expense in relation to the business's shop fittings?
- c What percentage of the asset's cost is written off per annum?
- d What will be the carrying value of the shop fittings on 31 December 2030?
- e If the estimated residual value of the shop fittings is \$2000, what is the estimated useful life of the asset?
- f On what date does the business plan to dispose of the asset?
- g Consider the following: 'Depreciation is based on estimates. It is therefore unreliable and should not be included in an income statement.' Do you agree with this statement? In your answer, consider the demands of relevance and verifiability and refer to financial data provided for Fanboy Frenzy.

CASE STUDY

Bernadette Kirkwood is the owner of Hightail Hammocks, a retail business that specialises in hammocks and outdoor furniture. As the business grew over the years, Kirkwood discovered that free delivery was one way of attracting additional customers. She now delivers most of the goods sold by her business, but she had to purchase new vehicles to keep up with demand.

The following information has been provided in relation to the delivery vehicles. *Note:* It is the business's policy to keep all its vehicles for three years before selling them or trading them in for new ones.

- **Vehicle 1:** Purchased on 1 January 2026 for \$28 000, plus modifications that cost \$1000. The vehicle is insured at a cost of \$500, and registration costs \$450 each year. Estimated residual value is \$9800.
 - **Vehicle 2:** Bought as a new vehicle for \$32 000 on 28 February 2027. The dealer's delivery fee was \$1100. Insurance of \$600 and registration of \$450 were also paid on 28 February. Predicted scrap value is \$11 400.
 - **Vehicle 3:** Cost of the new vehicle on 1 September 2028 was \$36 400, plus 12 months' insurance of \$600 and registration of \$480. The dealer's delivery fee of \$1200 was paid in cash. A GPS tracking and security system was installed in this vehicle as a permanent fixture on 1 September 2028 at a cost of \$1460. Expected residual value in three years' time is \$19 200.
 - **Vehicle 4:** This vehicle was bought as a second-hand model for \$16 000 on 31 January 2029. Registration was arranged at an annual cost of \$480. The vehicle hasn't been insured. Estimated residual value when useful life has expired is about \$8400.
- a Calculate the amount of depreciation expense that would be shown in the income statements for the years ended 30 June 2028, 2029 and 2030 (show all workings).
 - b Prepare extracts from the balance sheets as at 30 June 2028, 2029 and 2030, to show how the asset Vehicles would be reported in each of these three years.
 - c Explain the link (if any) that exists between the qualitative characteristic of verifiability and your calculations for depreciation of vehicles.
 - d Consider the following statement: 'Depreciation is based on estimates of residual value, not on the cost of an asset.' Do you agree with this statement? Give reasons to justify your answer.



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ETHICAL CONSIDERATIONS

Darryl Cruse is the owner of a landscaping business. He has six vehicles on the road on a regular basis, driving to various jobs around Melbourne. He drives one of the vehicles, and his employees drive the other five. As his employees start work at 7 a.m., Cruse lets them use the business vehicles to drive home at the end of the day. This allows them to drive straight to jobs each morning, instead of reporting to head office first.

However, in recent weeks Cruse has noticed a significant increase in his petrol expenses. He suspects that some of his employees are using the business vehicles after hours for personal use. He also noticed a couple of his vehicles parked at a local take-away restaurant at 2 p.m. on Friday.

Acting on his suspicions that the vehicles are being used inappropriately, Cruse has asked for quotes to install GPS tracking devices in them. This will allow him to determine when the vehicles are being used and where they have been. He will be able to track them 24 hours a day, thus keeping a watchful eye on his employees.

A simpler solution might be to instruct all five workers to return the vehicles to head office every day once their jobs are completed. This may save some petrol, but it could cost valuable time, which is a concern.

What advice would you give Cruse? Discuss fully, with reference to the following ethical issues:

- Should Cruse install GPS tracking in his vehicles?
- Would this represent an invasion of the privacy of his employees?
- Should he inform his employees, or simply go ahead with the installation? (After all, his business owns the vehicles.)
- What other alternatives may be appropriate in this situation?



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EXAM-STYLE QUESTIONS

Question 1 (3 marks)

The information below was extracted from a balance sheet.

Vehicle	\$32 000	
Less: Accumulated depreciation	\$12 000	\$20 000

The owner is under the impression that \$20 000 is the current market value of the vehicle. His accountant has explained that this isn't true. **Explain** what the \$20 000 actually represents.

Question 2 (6 marks)

A delivery van was purchased on 1 March 2028 for \$45 000, plus GST. It is expected to be used for five years before being sold for about \$15 000. The owner has decided to depreciate the van using the straight-line method. The reporting period ends on 30 June each year.

- Prepare** the general journal entry to record depreciation of the delivery van on 30 June 2028. A narration is required. (3 marks)
- Prepare** a balance sheet extract to show how the delivery van would be reported on 30 June 2030. (3 marks)

Question 3 (4 marks)

The allocation of depreciation affects the key accounting reports prepared at the end of a period. **Explain** how depreciation affects each of the three accounting reports on balance day.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 16

15 16 17 18 19 20 21 22 23

Reducing balance depreciation

KEY TERM

Reducing balance method

Chapter 15 introduced the concept of depreciation and described how to use the straight-line method to allocate an asset's cost over time. But some assets earn more revenue in their early years of use than in later years. For these assets, reducing balance is the most suitable method of depreciation.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** the reducing balance method of depreciation [16.1]
- **explain** why the reducing balance method may be used for some assets [16.1]
- **compare** the straight-line and reducing balance methods [16.2]
- **prepare** a graph showing the differences between the two methods [16.2]
- **explain** the effect that a change in depreciation method may have on accounting reports [16.2]
- **justify** depreciation methods for a variety of assets [16.3]
- **explain** the role that accounting assumptions and the qualitative characteristics of accounting play in relation to changing depreciation methods [16.3]

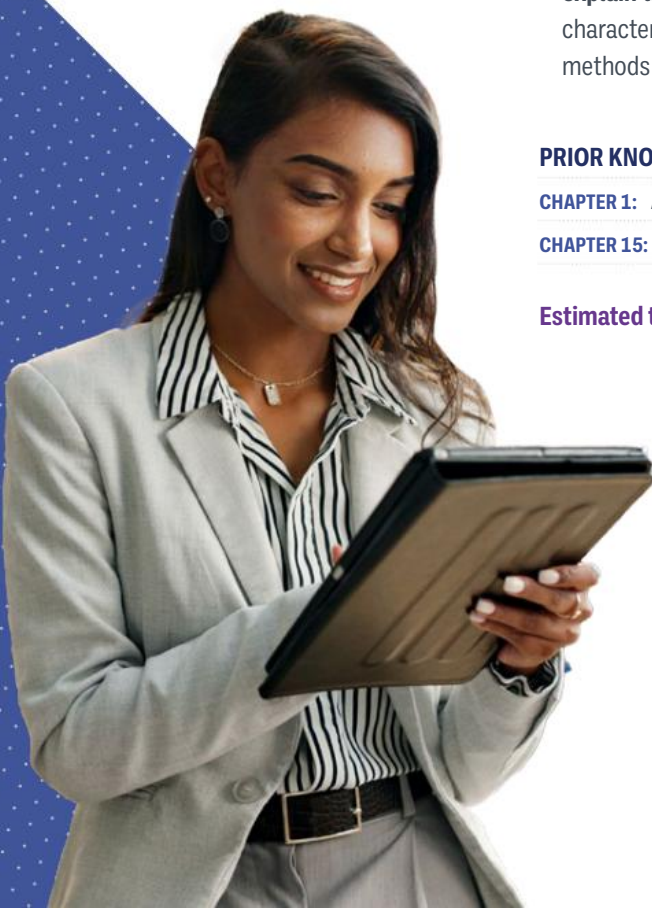
PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 15: Straight-line depreciation



Estimated time required: 1 week





16.1 The reducing balance method of depreciation

As we saw in Chapter 15, depreciation is the allocation of a cost of a non-current asset over its useful working life. The allocation of depreciation as an expense meets the demands of both *relevance* and the *period assumption* because it helps to determine an accurate profit by matching all revenues earned with all expenses incurred. Depreciation is an expense that should be matched against the revenue that's actually produced by the asset that's being depreciated.

The need for an alternative method

Some assets earn a constant amount of revenue throughout their lives, regardless of their age. Shop fittings, display equipment and office furniture are all similar assets in terms of their efficiency in helping a business to earn revenue from the first year to the last year of their useful lives.

Other assets may be more efficient when they are new and therefore produce most of their revenue in their first years of use. Their efficiency in producing revenue decreases as they get older. For example, the more that a drill press is used, the more likely it is to break down and to spend time being repaired. This means it's less likely to earn as much revenue for the business as when it was first purchased.

It's logical, therefore, to allocate less depreciation when the asset is likely to be producing less revenue for the business. This method meets the demands of *accrual accounting*, as it strives to determine an accurate profit for the current period. As a general rule, an asset should have more of its cost allocated as an expense when it is likely to generate more revenue. When its revenue-earning capacity diminishes, the amount of depreciation being written off as an expense should also be reduced. To represent this, accountants use the **reducing balance method** of depreciation.

reducing balance method

a method of depreciation that allocates more depreciation in the early years of an asset's life and less depreciation in its later years

Calculating reducing balance depreciation

When an asset has a consistent revenue-earning capacity over its useful life, the amount of depreciation being allocated should also be consistent. The straight-line method of depreciation follows this principle.

EXAMPLE 16.1

Segway Solutions purchased a delivery vehicle on 1 July 2028 and provided the following details.

Purchase price of van	\$32 000
Estimated useful life	4 years
Estimated residual (scrap) value	\$12 800

The formula for calculating depreciation expense under the straight-line method is:

$$\frac{32\,000 - \$12\,800}{4} = \$4\,800 \text{ per annum}$$

The formula for calculating the depreciation percentage is:

$$\frac{\$4\,800}{\$32\,000} = \$15\% \text{ per annum}$$



However, the revenue-earning capacity of some assets changes over time, so a fixed rate of depreciation may not be appropriate. In line with the *period assumption* and to comply with *relevance*, it is important to match revenue earned in a particular time period with the expenses incurred over that same period. If an asset earns more revenue in a particular year, it is logical to allocate a greater amount of depreciation in that year.

The reducing balance method of depreciation (also known as the diminishing balance method) follows the general principle that an asset produces more revenue in its early life and less in its later years. If an asset is expected to earn more in a particular period, *relevance* demands that more depreciation should be allocated in that period.

The formula for calculating depreciation expense under the reducing balance method is:

$$\text{Depreciation percentage rate} = 100 \left(1 - \sqrt[n]{\frac{s}{c}} \right)$$

where n = estimated useful life (expressed as a number of years)

s = estimated scrap value (or residual value)

c = the cost of the asset

You are *not* required to use this formula to determine the exact rate. Usually, it is simply calculated at 1.5 times the rate used under the straight-line method.

EXAMPLE 16.2

As seen in Example 16.1, Segway Solutions purchased a delivery vehicle on 1 July 2028.

Purchase price of van	\$32 000
Estimated useful life	4 years
Estimated residual (scrap) value	\$12 800

Since the vehicle will become less efficient over time, it's more appropriate to calculate depreciation using the reducing balance method.

Putting the details of the vehicle into the formula for the reducing balance method gives the following result:

$$\begin{aligned} \text{Depreciation percentage rate} &= 100 \left(1 - \sqrt[4]{\frac{12\,800}{32\,000}} \right) \\ &= 100 \left(1 - \sqrt[4]{0.4} \right) \\ &= 100(1 - 0.7953) \\ &= 20.47\% \end{aligned}$$

This is the formula used to determine the exact percentage to be used for reducing balance depreciation. Don't try to memorise this formula - you *won't* be asked to use it!

Applying the depreciation rate

Once you have calculated the percentage rate of depreciation, apply it to the carrying value of the asset at the end of each period. You can see that the reducing balance method doesn't use the residual value (scrap value) of an asset in the yearly calculation of depreciation. The residual value is considered in the formula to determine the annual percentage rate, but the rate is then simply applied to the reducing carrying value of the asset over its useful life.

This is very different from the calculation of annual depreciation under the straight-line method. Under that method, the residual value is necessary for determining the expense to be allocated; that is: (cost – residual value)/useful life.

Table 16.1 shows the depreciation calculation for each year under the reducing balance method.

Table 16.1 Calculation of depreciation using the reducing balance method*

Year ended	Depreciation expense	Accumulated depreciation	Carrying value
30/6/29	20.47% of \$32 000 = \$6550	\$6550	\$32 000 - \$6550 = \$25 450
30/6/30	20.47% of \$25 450 = \$5210	\$6550 + \$5210 = \$11 760	\$32 000 - \$11 760 = \$20 240
30/6/31	20.47% of \$20 240 = \$4143	\$11 760 + \$4143 = \$15 903	\$32 000 - \$15 903 = \$16 097
30/6/32	20.47% of \$16 097 = \$3297	\$15 903 + \$3297 = \$19 200	\$32 000 - \$19 200 = \$12 800

*Adjusted to eliminate rounding-off errors

Note how the carrying value of the asset decreases over time. When the depreciation percentage is applied, the depreciation expense also decreases with each passing year.

The depreciation rate used under the reducing balance method is a fixed percentage each year. However, the amount of depreciation expense each year still decreases, because the percentage rate is applied to the carrying value of the asset. As the asset's carrying value decreases, so does the depreciation expense in each of the following years.

Table 16.1 highlights how the reducing balance method allocates more depreciation expense in the earlier years of an asset's life. The calculations made earlier under the straight-line method determined a rate of \$4800 per annum for the same vehicle. Under the reducing balance method, depreciation was greater than \$4800 in the first two years and then lower than \$4800 in the last two years.

Keep in mind two further points when calculating depreciation expense under the reducing balance method:

Remember

Depreciation is based on estimates of useful life and residual value, so it isn't expected to be exact. These approximations and omissions are usually considered acceptable.

- Use an approximation rate of 1.5 times the rate used under the straight-line method. In the example of Segway Solutions, the rate under the straight-line method was 15% per annum, so use a rate of 22.5% ($15\% \times 1.5$) for the reducing balance method. (According to the formula, the actual rate was found to be 20.47%, so the approximation method is reasonably accurate.)
- The qualitative characteristic of *relevance* requires all important information to be reported, but insignificant values (such as cents) can be omitted from financial reports.



16.2 Comparing depreciation methods



The following table, prepared for the vehicle owned by Segway Solutions, highlights the differences between the two methods of depreciation.

Year	Straight-line method	Reducing balance method
2029	\$4 800	\$6 550
2030	\$4 800	\$5 210
2031	\$4 800	\$4 143
2032	\$4 800	\$3 297
Total	\$19 200	\$19 200

The reducing balance method will allocate more depreciation in the earlier years and less in the later years.

As you can see, the total amount of depreciation allocated over the life of the asset is *exactly the same* under both methods. The straight-line method allocates a fixed amount of depreciation each year, while the reducing balance method allocates more in the early years and less in the later years. However, over the life of the asset, both methods allocate the same amount of cost and end up with the original estimate of residual value as the carrying value of the asset after its four-year life.

The graph in Figure 16.1, based on the above data, clearly shows the differences in cost allocation between the two depreciation methods. As the years pass, the amount of depreciation allocated under the reducing balance method decreases. Depreciation under the straight-line method will be at a constant rate throughout the asset's life. This fundamental difference will always exist between these two methods of depreciation, regardless of the type of asset involved and its estimated useful life.

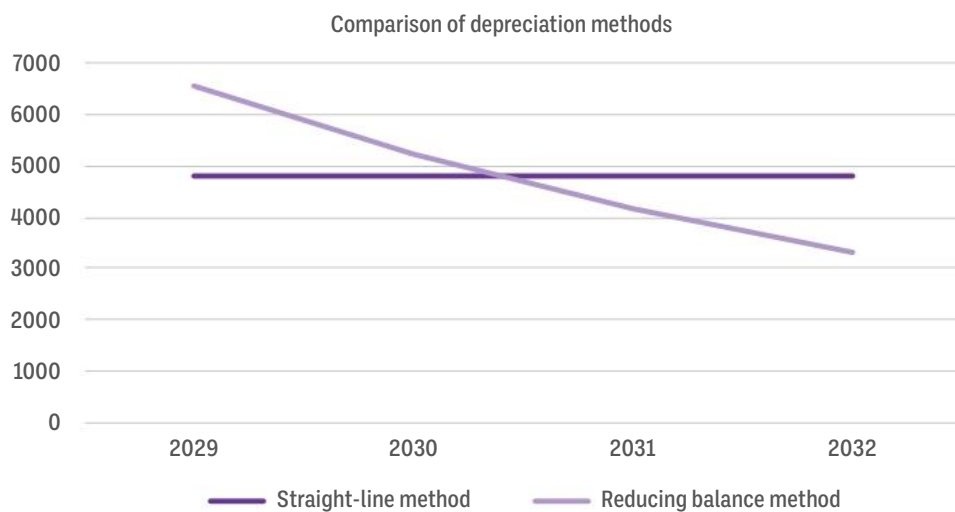


Figure 16.1 Graph showing both the straight-line and reducing balance methods

Remember

The only difference between the two depreciation methods is the amount of cost to be allocated in a particular period. The amount of depreciation, once determined, is recorded by exactly the same general journal entry on balance day. Only the amount will vary, depending on the method chosen.

The general journal entries in Figures 16.2 and 16.3 allow a comparison of the two methods over the life of the Segway Solutions vehicle. (The narration for each entry specifies the depreciation method used.)

Figure 16.2 General journal entries: Straight-line depreciation

GENERAL JOURNAL			
Date	Details	Dr	Cr
30/6/29	Depreciation of vehicle	4 800	
	Accumulated depreciation of vehicle		4 800
	Adjustment for depreciation of vehicle at 15% p.a. straight-line method		
30/6/30	Depreciation of vehicle	4 800	
	Accumulated depreciation of vehicle		4 800
	Adjustment for depreciation of vehicle at 15% p.a. straight-line method		
30/6/31	Depreciation of vehicle	4 800	
	Accumulated depreciation of vehicle		4 800
	Adjustment for depreciation of vehicle at 15% p.a. straight-line method		
30/6/32	Depreciation of vehicle	4 800	
	Accumulated depreciation of vehicle		4 800
	Adjustment for depreciation of vehicle at 15% p.a. straight-line method		

Figure 16.3 General journal entries: Reducing balance depreciation

GENERAL JOURNAL			
Date	Details	Dr	Cr
30/6/29	Depreciation of vehicle	6 550	
	Accumulated depreciation of vehicle		6 550
	Adjustment for depreciation of vehicle at 20.47% p.a. reducing balance method		
30/6/30	Depreciation of vehicle	5 210	
	Accumulated depreciation of vehicle		5 210
	Adjustment for depreciation of vehicle at 20.47% p.a. reducing balance method		
30/6/31	Depreciation of vehicle	4 143	
	Accumulated depreciation of vehicle		4 143
	Adjustment for depreciation of vehicle at 20.47% p.a. reducing balance method		
30/6/32	Depreciation of vehicle	3 297	
	Accumulated depreciation of vehicle		3 297
	Adjustment for depreciation of vehicle at 20.47% p.a. reducing balance method		

Note that the titles used in the general journal for depreciation don't change, whichever method is used. The only thing that changes is the dollar amount of each entry.

EXAM-STYLE QUESTION

Sophie Reid, the owner of Clocks & Watches, purchased on 1 October 2027 a new computer system that cost \$8140, including GST. Insurance for the system cost \$550, plus GST, for 12 months' cover. The supplier installed the system for an additional \$1400, plus GST. Reid has estimated the useful life of the system to be four years but is unsure about estimating a residual value. She wasn't sure which depreciation method to use but has decided to use reducing balance at 25% per annum. (5 marks)

- a Prepare the general journal entry required on 30 June 2028 to record the depreciation of the computer system using the reducing balance method. A narration is not required.
- b Prepare a balance sheet extract to show how the computer system would be reported on 30 June 2029.

Sample answer**a GENERAL JOURNAL**

Date	Details	Dr	Cr
30 Jun 2028	Depreciation of computer system	1 650	
	Accumulated depreciation of computer system		1 650

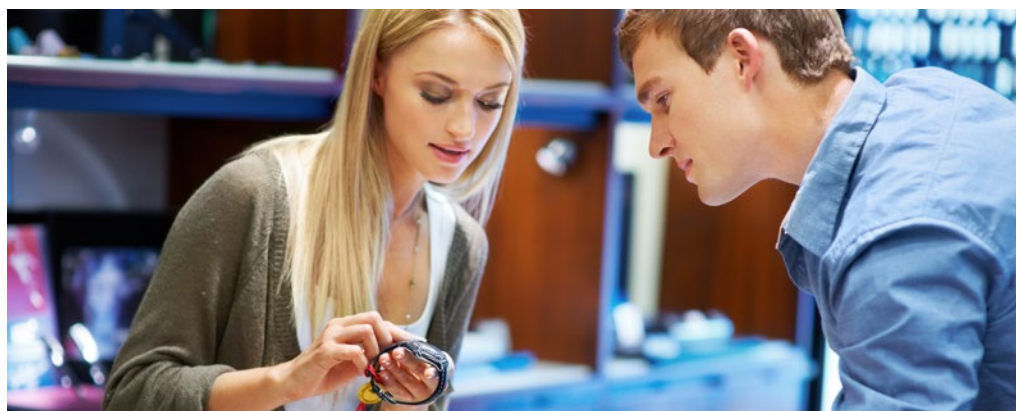
b BALANCE SHEET (EXTRACT) AS AT 30 JUNE 2029

Non-current assets	\$	\$
Computer system	8 800	
Less: Accumulated depreciation	3 438	5 362

Exam advice

Exam questions will sometimes contain information that is irrelevant to your answer. Such information is included to test your knowledge of a particular area of the course. For example, in the above question you were told there was insurance expense incurred, installation costs were charged and the useful life of the asset was estimated at four years. You can ignore the insurance, as it's payable each year (i.e. don't treat it as part of the cost of the asset). Treat the installation costs as part of the asset's cost. The useful life is irrelevant, as you were provided with a percentage rate for the reducing balance method. Furthermore, you don't need the residual value when you know the percentage rate of depreciation to be allocated.

Don't include items that you know aren't relevant to the task being examined. Some students include everything when a list of items is provided, just because they are there! Revise topics thoroughly, read questions carefully and be strong in your decision-making. Don't get distracted by irrelevant information!



Depreciation in the balance sheet

The presentation of non-current assets in a balance sheet is also unaffected by the choice of depreciation method. The cost of each asset is still shown, and accumulated depreciation is deducted from this figure to determine the carrying value on balance day. Once again, the only difference between the two methods is that the amount of accumulated depreciation will change depending on which method is used.

The following balance sheet extracts show how Segway Solutions' vehicle would be reported under each of the two methods.

STRAIGHT-LINE METHOD

Balance sheet extracts as at 30 June:	2029	2030	2031	2032
Non-current assets				
Vehicle	32 000	32 000	32 000	32 000
Less: Accumulated depreciation	4 800	9 600	14 400	19 200
	27 200	22 400	17 600	12 800

REDUCING BALANCE METHOD

Balance sheet extracts as at 30 June:	2029	2030	2031	2032
Non-current assets				
Vehicle	32 000	32 000	32 000	32 000
Less: Accumulated depreciation	6 550	11 760	15 903	19 200
	25 450	20 240	16 097	12 800

Regardless of which depreciation method is selected, the carrying value of the asset will be exactly the same at the end of its useful life.



16.3 Choosing a depreciation method

Which depreciation method should a business use?

There is no single answer to this question. The appropriate method is the one that best satisfies the demands of *relevance* and the *period assumption*. In order to identify the appropriate method, management needs to identify the revenue-earning pattern of the asset.

- If the asset is expected to earn more revenue in its earlier years than later in its life, then the reducing balance method is most appropriate.
- If the asset usually has the same revenue-earning capacity regardless of its age, then the straight-line method is most appropriate.

The choice of depreciation method should always be linked to the nature of the asset being considered. A business that has numerous non-current assets may use both methods, since the various assets may have different revenue-earning patterns.

The following examples illustrate where one or other method may be more appropriate than the other.

Asset	Depreciation method suggested
Shop fittings	Straight-line
Office furniture	Straight-line
Machinery	Reducing balance
Vehicles	Reducing balance

Both shop fittings and office furniture are usually just as efficient in their later years as when they are first purchased. Therefore, for these assets, allocate a fixed amount of depreciation using the straight-line method.

Assets such as machinery and vehicles are usually more efficient when they are new, so there is a reasonable expectation that they will earn more revenue in these early years. Following the *period assumption*, it's desirable to match this greater amount of revenue with a higher allocation of depreciation expense. Therefore, for these assets, the reducing balance method better reflects their revenue-earning pattern.

Once the most appropriate depreciation method is selected, apply it consistently over the asset's life in order to meet the qualitative characteristic of *comparability*. (Comparisons are difficult to make if accounting methods are constantly changing over several consecutive periods.)



The method used to calculate depreciation of assets should be the one that best satisfies the demands of *relevance* and the *period assumption*.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [16.1]** Reducing balance is a method of depreciation that allocates more depreciation in the early years of an asset's life and less in its later years. It may be used with assets that become less useful or less effective over time, such as vehicles.
- [16.2]** Depreciation under the straight-line method is at a constant rate throughout the asset's life. Over the same period, the amount of depreciation allocated under the reducing balance method decreases. The only difference between the straight-line and reducing balance methods is the amount of cost to be allocated in a particular period.
- [16.3]** The depreciation method used should be the one that best satisfies the demands of *relevance* and the *period assumption*.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Depreciation: Comparing methods

Kevin Riley's Equestrian Centre purchased office equipment at a cost of \$12 000, plus \$1200 GST. Riley is considering whether to use the straight-line or the reducing balance method of depreciation. He expects to use the equipment for four years before it's sold. You have been asked to supply information regarding straight-line depreciation at the rate of 20% per annum or reducing balance depreciation at 30% per annum.

Prepare tables as shown below and complete the details for each of these two depreciation methods to assist Riley with his decision.

METHOD OF DEPRECIATION: STRAIGHT-LINE

Year	Depreciation	Accumulated depreciation	Carrying value
1			
2			
3			

METHOD OF DEPRECIATION: REDUCING BALANCE

Year	Depreciation	Accumulated depreciation	Carrying value
1			
2			
3			

2 Depreciation: Comparing methods

Castlemaine Cladding purchased a new vehicle at a cost of \$24 000, plus GST of \$2400. The vehicle is expected to be used in the business for five years. Its residual value is estimated to be about \$5700.

- a Prepare tables as shown below and complete the details for each of the two depreciation methods. (For the reducing balance method, simply apply depreciation at 25% per annum.)

METHOD OF DEPRECIATION: STRAIGHT-LINE

Year	Depreciation	Accumulated depreciation	Carrying value
1			
2			
3			

METHOD OF DEPRECIATION: REDUCING BALANCE

Year	Depreciation	Accumulated depreciation	Carrying value
1			
2			
3			

- b Prepare a line graph to highlight the differences between the two depreciation methods. Using one line for each method, show the depreciation expense each year. *Note:* Prepare one graph covering three years of the asset's depreciation. Then prepare a second graph covering five years' depreciation.



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- c In what years does the reducing balance method allocate:
 - i more depreciation than the straight-line method?
 - ii less depreciation than the straight-line method?
- d Prepare two graphs as you did in part a of this question. The first graph should cover three years of depreciation and the second graph five years of depreciation.



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3 Reducing balance depreciation

Five Star Comics bought a new photocopier for its office on 1 February 2028 for \$14 000, plus GST of \$1400. The machine is to be used until it is four years old, after which it's expected to be traded in for a new model. Balance day for the business is 31 July each year. The photocopier is to be depreciated by the reducing balance method at the rate of 20% per annum.

- a Calculate the depreciation expense to be allocated on 31 July 2028, 2029 and 2030.
- b Prepare the necessary adjusting and closing entries for depreciation of the photocopier for each of the three years.
- c Prepare the following general ledger accounts: Photocopier, Depreciation of Photocopier, and Accumulated Depreciation of Photocopier.
- d Prepare a balance sheet extract to show how the photocopier would be reported as at 31 July 2028, 2029 and 2030.
- e Do you think the reducing balance method is appropriate for depreciating a photocopier? Explain your answer fully.



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4 Depreciation entries: Reducing balance method

Connie Grant is the owner of Warrnambool Wigs & Hair Extensions. On 1 October 2028, she purchases display equipment for \$35 200, including GST. She decides to depreciate the equipment at 25% per annum using the reducing balance method. The books of the business are closed on 31 December each year.

- a Prepare the necessary adjusting and closing entries for depreciation of the display equipment for the years ended 31 December 2028, 2029 and 2030. (Narrations are not required.)
- b Prepare the following general ledger accounts: Display Equipment, Depreciation of Display Equipment, and Accumulated Depreciation of Display Equipment.
- c Prepare a balance sheet extract to show how the display equipment would be reported as at 31 December 2028, 2029 and 2030.
- d A friend of Grant's suggests that she should use the straight-line method to depreciate the equipment, as it will result in a more consistent profit over the years. Do you agree? Explain your answer.
- e Grant may breach a qualitative characteristic of accounting if she changes depreciation methods. Explain the possible implications of this change, with reference to the relevant qualitative characteristic.



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5 Depreciation: Comparing methods

Rewind Retro Furnishings, a small business situated in Strathmore, is owned and operated by Brian Mathews. The business purchases a vehicle on 1 July 2028 for \$28 000, plus GST. Mathews expects to own the vehicle for about four years. He is unsure whether to depreciate the asset under the straight-line method at 20% per annum, or under the reducing balance method at 30% per annum. The business closes its books on 31 December each year.





- a** Using a spreadsheet, calculate depreciation under the two methods for the years ended 31 December 2028, 2029, 2030 and 2031.
- b** Explain fully the difference in profit for each of the four years if the vehicle is depreciated using the reducing balance method.
- c** Which method would you recommend Mathews use to depreciate the vehicle? Explain your answer fully, with reference to an accounting assumption.

6 Depreciation: Comparing methods

Makeup 2 Your Door purchased a vehicle on 1 April 2025 for \$24 000, including GST. The owner of the business, Pauline Duggan, estimated that the vehicle would have a useful life of five years and could then be sold for approximately \$9600. The vehicle was depreciated using the straight-line method on 31 March 2026 and 2027.

However, the owner has been told that reducing balance depreciation is a more appropriate method for depreciating a vehicle. She calculates that the rate to be charged would be 20% of the asset's carrying value.

- a** If Duggan uses the straight-line method again in 2028, what would be the depreciation expense allocated for the year?
- b** If she depreciates the vehicle using the reducing balance method at 20% per annum, what would be the depreciation expense for the year ended 31 March 2028?
- c** Explain the effect the change of accounting method would have on the net profit figure reported for the year ended 31 March 2028.
- d** Do you think Duggan should change the method used? Explain your answer fully.



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MODELLING EXERCISE

Costa Kriezis is the owner of Get Fit!, a business selling bodybuilding and gym equipment. He needs your advice regarding the depreciation of a fleet of delivery vehicles owned by the business, which offers free delivery. He has just updated the vehicles, at a cost of \$250 000. He purchased the new vehicles in week one of the new period, which runs for 12 months.

The vehicles are estimated to have a useful life of four to five years. Therefore, Kriezis is considering straight-line depreciation at either 25% (over a useful life of four years) or 20% (over five years). As the vehicles are constantly being used, he hasn't allowed for residual value.

Kriezis has also heard that if he applies reducing balance depreciation, the profit will be lower and he may pay less tax. He is now also considering using the reducing balance method, at 1.5 times the rate of the straight-line method. This would mean that depreciation would be applied at either 37.5% per annum (over four years) or 30% (over five years).

In each of the past three years, the business has earned a profit (before considering depreciation expense) of \$200 000.

- a** Prepare a spreadsheet to show Kriezis the effect on profit over the next four years under each of the four possible alternatives:
 - i** straight-line at 25% per annum
 - ii** straight-line at 20% per annum
 - iii** reducing balance at 37.5% per annum
 - iv** reducing balance at 30% per annum.

In your spreadsheet, show clearly the depreciation expense for each of the four years and the net profit (after depreciation) for each of the four scenarios.

- b** With reference to the results shown in your spreadsheet, advise Kriezis which scenario he should adopt. Your advice should consider the requirements of accrual accounting, faithful representation, relevance and verifiability.
- c** Kriezis clearly believes that residual values shouldn't be applied in this case, and that the most important thing is to minimise profit so that his business pays less tax. Discuss the ethics of such decision-making, taking into consideration the effect on net profit (after depreciation).



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EXAM-STYLE QUESTIONS

Question 1 (7 marks)

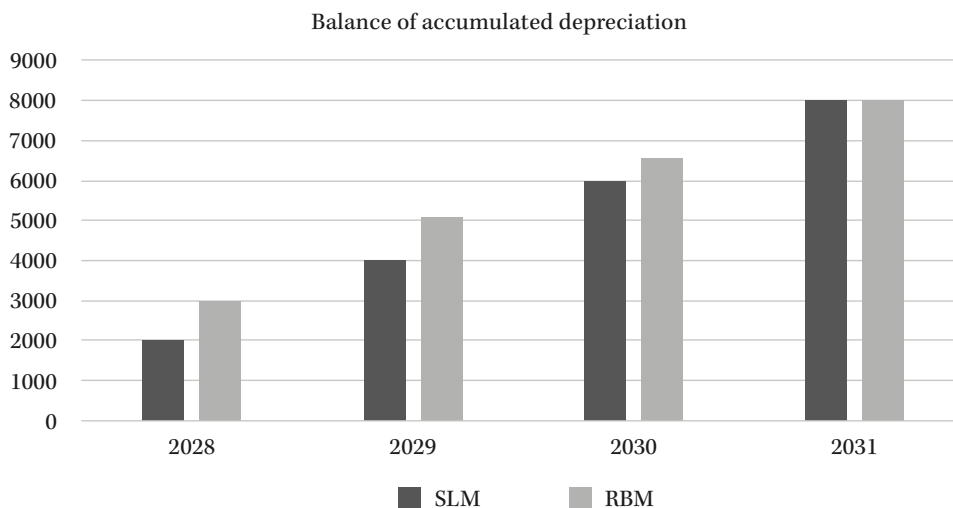
Warragul Electricals sells a range of whitegoods and offers free delivery to its customers. On 1 April 2028, the business purchased a new delivery truck at a cost of \$48 000, plus GST. It also paid registration and insurance of \$1200, plus GST, on the same day. All payments were made via an electronic funds transfer (EFT). The van is to be depreciated using the reducing balance method at 25% per annum. Balance day is 30 June each year.

- Prepare the general journal entry required on 1 April 2028. A narration is not required. (3 marks)
- Prepare the adjusting entries required on 30 June 2028 and 30 June 2029 to record the depreciation expense in relation to the delivery van. Narrations are not required. (4 marks)

Question 2 (6 marks)

A business owner is considering which method of depreciation to use in relation to her computer system. She may use the straight-line method at 20% per annum, or the reducing balance method. Balance day for this business is 31 December each year.

Consider the following graph, which shows the balance of accumulated depreciation under the two alternative methods.



- State the cost of the computer system purchased by this business. (1 mark)
- Calculate the carrying value of the asset as at 31 December 2030 if the straight-line method is used. (1 mark)
- State the useful life of this asset in years and explain how you determined this figure. (2 marks)
- The business's accountant has advised that the reducing balance method should only be used for some assets. Explain why this method should not be used for all non-current assets. (2 marks)



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 17

15 16 17 18 19 20 21 22 23

Buying and selling non-current assets

KEY TERMS

Loss on disposal of asset
Over-depreciation
Under-depreciation
Proceeds from disposal of asset
Profit on disposal of asset

In this chapter, you will learn how to record both purchases and sales of non-current assets in the general journal, and how to determine the profit or loss made on disposal of an asset.

Learning objectives

By the end of this chapter, you will be able to:

- **prepare** a general journal entry to record a purchase of a non-current asset for cash or financed by a loan **[17.1]**
- **record** a purchase of a non-current asset in the general ledger **[17.1]**
- **prepare** general journal entries to record the disposal of a non-current asset for cash or as a trade-in **[17.2]**
- **calculate** a profit or loss on disposal of an asset **[17.2]**
- **prepare** a Disposal of Asset account in the general ledger **[17.2]**
- **classify** profits and losses on disposal in an income statement **[17.3]**
- **explain** how a profit or loss on disposal occurs in relation to the allocation of depreciation **[17.3]**
- **explain** how the depreciation method used affects the profit or loss on disposal of a non-current asset **[17.3]**

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 15: Straight-line depreciation

CHAPTER 16: Reducing balance depreciation



Estimated time required: 1 week





17.1 Recording the purchases of non-current assets

When a business purchases a non-current asset, it may purchase it for cash (e.g. when buying small items such as computers) or, in the case of larger items, it may finance the purchase with a loan. Trade credit isn't usually used to buy long-term assets, as it's unrealistic to pay for large purchases using credit terms of, say, 30 days.

If a non-current asset is bought for cash, the entry in the general journal is straightforward, as Figure 17.1 shows.

Figure 17.1 General journal entry for the purchase of a non-current asset for cash

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Jul	Laptop computer	2 000	
	GST clearing	200	
	Cash at bank		2 200

This journal entry establishes the Laptop Computer ledger account, adjusts the GST Clearing account for the GST paid, and decreases the Cash at Bank account with the total amount of \$2200.

A business may buy a single computer with cash rather than taking out a loan.



Recording purchases of assets using borrowed funds

The purchase of a non-current asset using borrowed funds is a little different. There are actually two transactions taking place. Once the finance has been arranged, the business will *receive* the amount borrowed. Management can then shop around for the best deal and *purchase* the asset in the usual manner.

Consider the purchase of machinery for \$55 000, including \$5000 GST. The journal entries shown in Figure 17.2 result from taking out a loan and purchasing the machinery.

Figure 17.2 General journal entry for the purchase of a non-current asset using borrowed funds

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Jul	Cash at bank	55 000	
	Loan – NAB Finance		55 000
	Borrowed \$55 000 for the purchase of machinery (EFT transfer)		
1 Jul	Machinery	50 000	
	GST clearing	5 000	
	Cash at bank		55 000
	Purchase of machinery from Ace Manufacturing via EFT		

Record the receipt of funds from a loan first, and then record the purchase of the non-current asset in the usual fashion.

The double entries in the general ledger when these journal entries are posted are as follows.

CASH AT BANK					
		\$			\$
1 Jul	Loan – NAB Finance	55 000	1 Jul	Machinery/GST clearing	55 000

Cash at bank is increased through the receipt of the loan, and then decreased when cash is paid for the asset.

LOAN – NAB FINANCE					
		\$			\$
			1 Jul	Cash at bank	55 000

MACHINERY					
		\$			\$
1 Jul	Cash at bank	50 000			

GST CLEARING					
		\$			\$
1 Jul	Cash at bank	5 000			

Don't forget the GST paid on the purchase of a non-current asset.

The only difference in the above transaction is that the Cash at Bank account is affected by two entries:

- When the loan is approved and the cash is received, the Cash at Bank account is increased by the debit entry shown.
- When the non-current asset is purchased (which could be at a later date), the cash outflow is recorded in the usual manner.

The liability account for the loan has been established and this will now have to be repaid over a specified period of time.

Sometimes the loan amount won't be the same as the purchase price of the asset. If the purchase of the non-current asset is funded partly by cash from the business, the amount borrowed will be lower than the amount paid for the asset. This can simply be adjusted in the general journal to reflect the transactions taking place.



17.2 Disposal of non-current assets

When a business purchases a non-current asset, it debits the total cost to an asset account. Then, on every balance day throughout the asset's useful life, it is depreciated using one of two methods of depreciation (see Chapters 15 and 16). The final process in regard to a non-current asset is the recording of its disposal.

An asset may be scrapped for no return, be sold for cash, or be traded in on a replacement asset. Regardless of what happens to a non-current asset when it's disposed of, it must be removed from the books of the business, as it is no longer under the control of the entity.

The following steps are necessary to record the disposal of an asset for cash.

1. Transfer the cost of the asset to the Disposal of Asset account.
2. Transfer the accumulated depreciation of the asset to the Disposal of Asset account.
3. Record the proceeds gained from the sale of the asset in the Disposal of Asset account (i.e. record the amount received for the asset, or the amount granted as a trade-in).
4. Close off the Disposal of Asset account by recording the profit or loss on the sale of the asset. This entry will also close off the Disposal of Asset account.

A business needs to record assets that are disposed of, as they are no longer under the business's control.



EXAMPLE 17.1

Fangirl Collectables purchased a store-wide computer system, with barcode scanners and integrated EFTPOS.

1 July 2028	Purchased the computer system for \$10 000 cash plus GST Estimated useful life: 2 years Estimated scrap value: \$4000 Depreciation method: straight-line
30 June 2030	Sold the computer system for \$3800 cash, plus GST.

$$\text{Therefore, depreciation} = \frac{\$10\,000 - \$4\,000}{2} = \$3\,000 \text{ per annum}$$

The entries relating to the purchase of the computer system, its depreciation each year and the **loss on disposal of asset** (disposal of the system) on 30 June 2030 are all shown in the following general ledger accounts. (*Note:* This business closes its books on 30 June each year.)

GENERAL LEDGER

COMPUTER

		\$			\$
1/7/28	Cash at bank	10 000	30/6/30	Disposal of computer	10 000

CASH AT BANK

		\$			\$
30/6/30	Disposal of computer	3 700	1/7/28	Computer	10 000
	GST clearing	370		GST clearing	1 000

GST CLEARING

		\$			\$
1/7/28	Cash at bank	1 000	30/6/30	Cash at bank	370

DEPRECIATION OF COMPUTER

		\$			\$
30/6/29	Accum. dep'n of computer*	3 000	30/6/29	P&L summary	3 000
30/6/30	Accum. dep'n of computer	3 000	30/6/30	P&L summary	3 000

ACCUMULATED DEPRECIATION OF COMPUTER

		\$			\$
			30/6/29	Dep'n of computer	3 000
30/6/30	Disposal of computer	6 000	30/6/30	Dep'n of computer	3 000
		6 000			6 000

DISPOSAL OF COMPUTER

		\$			\$
30/6/30	Computer	10 000	30/6/30	Accum. dep'n of computer	6 000
				Cash at bank	3 800
				Loss on disposal of computer	200
		10 000			10 000

*This is one exception where you will not be penalised for using an abbreviation. The space provided in ledger accounts in the exam booklet is very small and it's impossible to write the full title.

LOSS ON DISPOSAL OF COMPUTER

		\$			\$
30/6/30	Disposal of computer	200	30/6/30	P&L summary	200

loss on disposal of asset
the difference between the carrying value of an asset and the proceeds from the disposal of the asset, where the proceeds are less than the carrying value

The Disposal of Asset account should always have four entries. The original cost of the asset should be on the debit side. The accumulated depreciation should be on the credit side, followed by the proceeds from the disposal. The profit or loss on disposal is then the missing figure, which closes the disposal account.

In Example 17.1, the computer has been sold at the end of its predicted useful life. Its carrying value (or book value) at this time will equal its estimated scrap value of \$4000 (\$10 000 – \$6000). This \$4000 represents the economic sacrifice made by the business on 30 June 2030. It can be compared against the actual cash generated by the disposal of the asset.

When the asset was disposed of, the business received \$3800; this amount has been recorded on the credit side of the Disposal of Computer account. To close off that account, the loss on sale of \$200 has been recorded on the credit side. This makes both sides equal, so the Disposal of Computer account is now closed off.

The corresponding debit entry of \$200 has been made to the Loss on Disposal of Computer account. This is logical, as the asset was sold for \$200 less than its carrying value, which was \$4000 at the time it was sold.

Loss from asset on disposal

Fangirl Collectables made a loss when it disposed of its computer system. This occurred either because the depreciation rate was too low over the life of the asset, or because the original estimate of scrap value was too high.

There may be other reasons for an asset being sold for less than its carrying value.

- The item is no longer popular, and there isn't much demand for it in the second-hand market.
- The item (e.g. a computer) may have become technologically obsolete.
- The item may be severely marked or damaged from its business use.

It is important to remember that depreciation isn't recorded in order to make predictions about market value at a particular point in time. It is allocated so that an appropriate amount of depreciation expense can be matched against the revenues generated by the asset.

Also, it's unrealistic to expect depreciation to be perfectly accurate, as scrap values are predicted for years in advance in the case of some assets. The entries required on the disposal of an asset simply adjust the firm's books for any **over-depreciation** or **under-depreciation** that has occurred over the life of the asset.

Using the above data, the following item would be reported in Fangirl Collectables' income statement under the heading 'Other expenses'.

Other expenses:	
Loss on disposal of computer	\$200

This one item neatly summarises the events that have taken place. The Computer and Accumulated Depreciation of Computer accounts have been eliminated. The proceeds from the sale have been recorded in the Cash at Bank account. As a result of all the transactions, the business has suffered a loss of \$200, and this has been reported as an expense for the reporting period.



over-depreciation a situation where a non-current asset has been depreciated too much due to under-estimation of either its useful life or its residual value, leading to a profit on disposal

under-depreciation a situation where a non-current asset hasn't been depreciated enough due to over-estimation of either its useful life or its residual value, leading to a loss on disposal

An asset may sometimes be sold for more than its carrying value when it has been depreciated too much. In this case, the firm recovers an amount in excess of the asset's carrying value. The difference between carrying value and the **proceeds from disposal of asset** will be reported in the firm's income statement under the heading 'Other revenue'.

proceeds from disposal of asset the amount of cash received, or the trade-in value granted, on the disposal of a non-current asset

For example, if the computer was sold for \$4100, this indicates that it was sold for \$100 higher than its carrying value. That is, the business has made a profit of \$100 on the disposal of the computer. As this \$100 hasn't been earned in the ordinary course of business, the profit on disposal of the computer shouldn't be listed in the top section of the report with the firm's sales. Such profits should always be reported separately under the heading of 'Other revenue'.

As is the case with all ledger entries, the transactions must first be recorded in the general journal. The ledger entries shown above for the disposal of the computer system have been prepared in the general journal in Figure 17.3. Note that these entries are based on the original data. That is, the computer was sold for \$3800, plus \$380 GST.

Figure 17.3 General journal entries for the disposal of a non-current asset

GENERAL JOURNAL				
Date	Details	Dr	Cr	
30 Jun	Disposal of computer	10 000		Step 1: Transfer the original cost of the asset being sold.
	Computer		10 000	
	Transfer of cost of computer sold			
	Accumulated depreciation of computer	6 000		Step 2: Transfer the accumulated depreciation of the asset being sold.
	Disposal of computer		6 000	
	Transfer of accumulated depreciation on computer sold			
	Cash at bank	4180		Step 3: Record the proceeds from the disposal of the asset.
	Disposal of computer		3 800	
	GST clearing		380	
	Cash received on disposal of computer			
	Loss on disposal of computer	200		Step 4: Record the profit or loss on the disposal of the asset.
	Disposal of computer		200	
	Transfer of loss on disposal of computer			

The totals of the debit entries to the Disposal of Computer account should equal the total credit entries made to that account. That is, the Disposal of Computer account must be closed off once all entries have been completed.

The disposal account has two purposes:

- It removes all balances in relation to the asset being sold, as it closes off the asset account itself, along with its Accumulated Depreciation of Computer account.
- It determines the profit or loss made on the disposal, which at the same time closes off the Disposal of Computer account itself.

When completing a Disposal of Asset account, always check that the debits equal the credits and that no balance is left remaining in the account.



17.3 Trading in non-current assets

The journal entries shown above cover the situation where an asset is sold for cash. If, instead, an asset is traded in, the entries required will vary slightly.

EXAMPLE 17.2

As before, Fangirl Collectables purchased a store-wide computer system. However, rather than selling it for \$3800 at the end of its useful life, it traded it in for \$3800 against the cost of a new system. The cost of the new asset is \$12 000, and the purchase is financed by a loan from GE Finance Company.

1 July 2028	Purchased the computer system for \$10 000 cash
	Estimated useful life: 2 years
	Estimated scrap value: \$4000
	Depreciation method: straight-line
30 June 2030	Traded in the computer system for \$3800 on a new model financed by a loan from GE Finance of \$9400 – total cost \$12 000, plus GST of \$1200.

$$\text{Therefore, depreciation} = \frac{\$10\,000 - \$4\,000}{2} = \$3\,000 \text{ per annum}$$

As the asset was traded in and not sold for cash, the entry shown previously as a cash receipt in the general journal won't exist, as no cash has changed hands. However, the trade-in allowance must now be recognised and recorded.

The appropriate entries under this new situation are shown in Figure 17.4.

Figure 17.4 General journal entries for the disposal of a non-current asset via a trade-in

GENERAL JOURNAL

Date	Details	Dr	Cr
30 Jun	Disposal of computer	10 000	
	Computer		10 000
	Transfer of cost of computer sold		
	Accumulated depreciation of computer	6 000	
	Disposal of computer		6 000
	Transfer of accumulated depreciation on computer sold		
	Computer	3 800	
	Disposal of computer		3 800
	Proceeds from the trade-in of computer		
	Loss on disposal of computer	200	
	Disposal of computer		200
	Transfer of loss on disposal of computer		

When an asset is traded in, rather than a debit to the Cash at Bank account, the debit entry is recorded in the asset account, as the trade-in value goes towards the purchase of the new asset.

As the disposal of the computer has been recorded as a trade-in, the purchase of the new computer would be recorded as in the following entry. (Note the amount borrowed to finance the purchase.)



30 Jun	Cash at bank	9 400	(3)
	Loan – GE Finance		9 400
	Borrowed funds to purchase new computer		
	Computer	(1) 8 200	
	GST clearing	(2) 1 200	
	Cash at bank		9 400
	Purchase of computer after trade-in of \$3800 allowed.		

- 1 Trade-in of \$3800 has been debited to the Computer account, so the amount to be paid in cash is \$8200 (\$12 000 – \$3800).
- 2 Actual purchase price was \$12 000, so GST payable to the supplier is still \$1200. If a trade-in allowance is granted, this is deducted from the total purchase price.
- 3 New computer cost \$12 000, plus \$1200 GST, so the total outlay equals \$13 200. As the trade-in allowance was \$3800, the amount borrowed from the finance company would be \$9400 (\$13 200 – \$3800).

The following ledger accounts show the full picture of the disposal of the computer, the trade-in on the new computer, the creation of the loan of \$9400, and the cash payment for the computer.

GENERAL LEDGER

COMPUTER

		\$			\$
1/7/28	Cash at bank	10 000	30/6/28	Disposal of computer	10 000
30/6/30	Disposal of computer	3 800			
30/6/30	Cash at bank	8 200			

The trade-in value goes towards the cost of the new asset being purchased.

DEPRECIATION OF COMPUTER

		\$			\$
30/6/29	Accum. dep'n of computer	3 000	30/6/29	P&L summary	3 000
30/6/30	Accum. dep'n of computer	3 000	30/6/30	P&L summary	3 000





ACCUMULATED DEPRECIATION OF COMPUTER

		\$			\$
			30/6/29	Dep'n of computer	3 000
30/6/30	Disposal of computer	6 000	30/6/30	Dep'n of computer	3 000
		6 000			6 000

DISPOSAL OF COMPUTER

		\$			\$
30/6/30	Computer	10 000	30/6/30	Accum. dep'n of computer	6 000
				Computer	3 800
				Loss on disposal of computer	200
		10 000			10 000

LOSS ON DISPOSAL OF COMPUTER

		\$			\$
30/6/30	Disposal of computer	200	30/6/30	P&L summary	200

LOAN - GE FINANCE

		\$			\$
			30/6/30	Cash at bank	9 400

CASH AT BANK

		\$			\$
30/6/30	Loan - GE Finance	9 400	30/6/30	Computer	8 200
				GST clearing	1 200

GST CLEARING

		\$			\$
30/6/30	Cash at bank	1 200			

Compare the above entries with those for Example 17.1 (p.):

- The cost is transferred in exactly the same way.
- The accumulated depreciation on the asset being disposed of is transferred in the same way.
- Rather than an entry being made for a receipt of cash, the trade-in allowance results in a debit to the non-current asset account, as the trade-in value is deducted from the cost price of the new computer being purchased.
- The loss on disposal is recorded in the same way; it closes off the Disposal of Computer account and creates the expense account for the loss on disposal.
- The final general ledger entries record the borrowing of cash from the finance company and the purchase of the new computer (including GST).

EXAM-STYLE QUESTION

A small business purchased a vehicle for cash on 1 November 2027 for \$59 400, including GST. It was to be depreciated at 20% per annum, using the reducing balance method. On 30 June 2029, the owner was unhappy with the performance of the vehicle and decided to trade it in on a new model, which cost \$44 000, plus GST. The trade-in allowance granted for the old vehicle was \$32 000 and the balance of the cost of the new vehicle was paid in cash.

Prepare the Disposal of Vehicle account, with all relevant entries on 30 June 2029 and the Vehicle account with all entries from 1 November 2027 to 30 June 2029.

(8 marks)

Sample answer**DISPOSAL OF VEHICLE**

		\$			\$
30/6/30	Vehicle	54 000	30/6/30	Accum. dep'n of vehicle	16 560
				Vehicle	32 000
				Loss on disposal of vehicle	5 440
		54 000			54 000

VEHICLE

		\$			\$
1/11/27	Cash at bank	54 000	30/6/30	Disposal of vehicle	54 000
30/6/30	Disposal of vehicle	32 000			
	Cash at bank	12 000	30/6/30	Balance	44 000
		44 000			44 000
1/7/30	Balance	44 000			

Exam advice

There are two common styles of exam questions on disposing of non-current assets. One style of question is to ask you to complete the disposal ledger account. The other popular question is to ask for the relevant general journal entries in relation to a disposal. You are therefore strongly advised to revise both formats. Practise the completion of the Disposal of Asset account, but also make sure that you know the double entries in the general journal format.

Don't include irrelevant material when you are asked to prepare particular ledger accounts. Some students are inclined to include everything they have revised about a topic. In the above ledger accounts, there are no entries required for the depreciation of the vehicle in each period. Read the questions carefully and only include the required information. There are no extra marks for including additional information!

Closing entries

The final step when the asset is disposed of is to close off the Loss on Disposal of Computer account to the Profit and Loss Summary account. As a loss on disposal is an expense item, it will be closed off along with all other expenses and then reported under 'Other expenses' in the income statement. The general journal closing entry is shown in Figure 17.5.

Figure 17.5 Closing entry for a loss on disposal of an asset

GENERAL JOURNAL			
30 Jun	P&L summary	200	
	Loss on disposal of computer		200
	Closing entry		

If an asset is disposed of at a profit – that is, at a value greater than its carrying value – the closing entry is simply the other way around.

As a **profit on disposal of asset** represents a revenue item, the Profit and Loss Summary account must be credited, with the debit entry being recorded in the revenue account to bring its balance back to zero. The closing entry for a profit of \$100 on the sale of a computer would be as shown in Figure 17.6.

profit on disposal of asset

the difference between the carrying value of an asset and the proceeds from its disposal, where the proceeds are greater than the carrying value

Figure 17.6 Closing entry for a profit on disposal of an asset

GENERAL JOURNAL			
30 Jun	Profit on disposal of computer	100	
	P&L summary		100
	Closing entry		



Practise and apply

17



REVISION: SUMMARY OF KEY CONTENT

- [17.1]** If a non-current asset is bought for cash, the general journal is straightforward. If it is purchased using borrowed funds, such as finance or a loan, the funds must first be recorded as a cash inflow or credit, then the purchase is recorded as a debit.
- [17.2]** When a non-current asset is disposed of, it is no longer under the control of the entity and must be removed from the books of the business. The cost of the asset, and its accumulated depreciation, must be transferred to the Disposal of Asset account. This account is also used to record any proceeds from the sale of the asset.
- [17.2]** A business may make a profit or a loss when disposing of an asset, depending on how the item has depreciated and how that depreciation has been recorded.
- [17.3]** If a non-current asset is traded in, rather than being sold for cash, no cash receipt entry is made in the general journal, as no cash has changed hands. However, the trade-in allowance must be recognised and recorded.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 General journal entries revisited

Prepare the required general journal entries to record the following information in the books of Galaxy Games during November 2028. *Note:* This business makes all payments by EFT.

Nov 4	A mobile phone was purchased for cash from Mobiles 'R' Us for \$700, plus GST of \$70.
10	An office desk was purchased for \$440, including GST of \$40, from Frankie Cotso Furniture.
18	The owner transferred \$330 to Furniture Galore for the purchase of a new office chair.
22	An accounts receivable, S Claus, returned goods that were originally sold for \$220, including GST of \$20. Credit note no. 54 was issued and full credit was granted. The cost price of the goods returned was \$100.
27	The owner was dissatisfied with some products in the store and returned them to Works Gameshop, the original supplier, who sent credit note no. 72. The original charge was \$300, plus GST of \$30, when the purchase was made.



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2 Purchase of non-current assets

On 5 September 2028, Krusty Products purchased a new computer for cash from PC Computers for \$2400, plus GST of \$240 (EFT transfer). On 12 September, the firm took out a loan from CBA Finance for \$15 400. On 15 September, it bought a photocopier costing \$14 000, plus GST of \$1400, from Kanen Co. Ltd (EFT transfer).

- Show the general journal entries to record these transactions.
- Post the general journal to the relevant general ledger accounts.



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3 Disposal of a non-current asset for cash

The following ledger accounts are extracted from the books of Brunswick Barbecues at the end of 2028.

VEHICLE

		\$			\$
31 Dec	Balance	18 000			

ACCUMULATED DEPRECIATION OF VEHICLE

		\$			\$
			31 Dec	Balance	13 000

On 31 December 2028, the vehicle was sold for \$3700 cash, plus GST.

- Prepare the general journal entries necessary to record the disposal of the vehicle.
- Prepare the closing entries required on 31 December 2028 in relation to the profit or loss on the disposal of the vehicle.





- c** Prepare the following general ledger accounts:
 - i** Vehicle
 - ii** Accumulated Depreciation of Vehicle
 - iii** Disposal of Vehicle
 - iv** Profit (or Loss) on Disposal of Vehicle.
- d** State the item that would be reported in the firm's income statement as a result of the disposal of the vehicle.

4 Disposal for cash: Straight-line depreciation

Ezard's Electricals closes its books on 30 June each year. The business purchased storage equipment on 1 July 2028 for \$8000, plus GST. The equipment had an estimated life of five years, after which time it was expected to be sold for \$1000. Management decided to depreciate the asset using the straight-line method. On 30 June 2030, the owner decided to sell the equipment for \$5500 cash, plus GST.

- a** Prepare the general journal entries required to record the disposal of the equipment on 30 June 2030.
- b** Prepare the following general ledger accounts for the period 1 July 2028 to 30 June 2030:
 - i** Storage Equipment
 - ii** Depreciation of Storage Equipment
 - iii** Accumulated Depreciation of Storage Equipment
 - iv** Disposal of Storage Equipment.
- c** Was a profit or a loss made on the disposal of the equipment? If so, how much?
- d** Explain why the profit or loss identified in part **c** occurred.

5 Disposal for cash: Reducing balance depreciation

Dragonforge Replica Armour purchased a delivery van for \$28 000, plus GST, on 1 July 2028. The owner decided to depreciate the van at the rate of 25% per annum using the reducing balance method. The business has a reporting period of 12 months and the balance day is 31 December. Due to its poor performance, the owner sold the van for \$14 800 cash, plus GST, on 31 December 2030.

- a** Prepare the general journal entries required to record the disposal of the vehicle on 31 December 2030.
- b** Prepare the closing entries required in relation to the disposal of the asset.
- c** Prepare the following general ledger accounts for the period 1 July 2028 to 31 December 2030:
 - i** Delivery Van
 - ii** Accumulated Depreciation of Delivery Van
 - iii** Disposal of Delivery Van
 - iv** Profit (or Loss) on Disposal of Delivery Van.



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6 Trade-in with new asset financed by a loan

The following accounts are found in the general ledger of Port Melbourne Import & Export.

PHOTOCOPIER

2028		\$			\$
31 Aug	Balance	32 000			

ACCUMULATED DEPRECIATION OF PHOTOCOPIER

		\$	2028		\$
			31 Aug	Balance	14 000

On 31 August 2028, the photocopier was traded in for a new model. The trade-in allowance was \$16 500 towards the cost of the new photocopier, which was \$35 000, plus GST of \$3500. The owner decided to borrow the remaining amount from EZ Finance Company. This loan was approved on 31 August and the funds were transferred to the business bank account.

- a Prepare the general journal entries necessary to record the disposal of the photocopier.
- b Prepare the general journal entry to record the loan from EZ Finance and the purchase of the new photocopier.
- c Prepare the following general ledger accounts with all relevant entries:
 - i Photocopier
 - ii Accumulated Depreciation of Photocopier
 - ii Disposal of Photocopier
 - iv Loan from EZ Finance and GST Clearing.



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7 Trade-in of an asset: Reducing balance depreciation method

Garra's Gift Shop closes its reporting period on 30 September each year. The owner of the business, Jon Garra, bought a computer system from MBI Computers on 31 July 2028 for \$16 000, plus GST of \$1600. He decided to depreciate the computer using the reducing balance method at 30% per annum, and to keep it for a few years. However, after discovering a new, improved model, Garra decided to trade in his old computer system and upgrade to the new one.

The supplier of the new system, Computer Solutions, gives Garra a trade-in allowance of \$2100 on 31 March 2030. The price of the new system was \$20 000, plus GST of \$2000. To assist with this purchase, Garra borrowed \$12 000 from ANZ Bank.

- a Prepare the general journal entry to record the purchase of the asset on 31 July 2028.
- b Prepare any necessary adjusting and closing entries on 30 September 2028 and 2029.
- c Prepare the general journal entries required to record the disposal of the computer on 31 March 2030.
- d Prepare the following general ledger accounts for the period 31 July 2028 to 31 March 2030:
 - i Computer System
 - ii Depreciation of Computer System
 - iii Accumulated Depreciation of Computer System
 - iv Disposal of Computer System
 - v Profit (or Loss) on Disposal of Computer System
 - vi Loan – ANZ Bank.
- e Was a profit or a loss made on the disposal of the computer system? If so, how much?
- f Explain how a profit or loss on disposal occurs.

8 Trade-in of an asset using business document

Katrina Williams is the proprietor of Kat's Boutique. On 1 September 2028, Williams purchased a sound system for her shop at a cost of \$8000, plus GST of \$800. DJ Hi-Fi Store charged an additional \$600 to install the system (plus GST of \$60). These costs were confirmed in writing by Tax Invoice 32. This amount was paid on 30 September 2028.

Williams thinks the sound system should be useful for about five years, after which she will trade it in. She anticipates that it will have a trade-in value of about \$1200. Balance day is 30 June and straight-line depreciation is applied.

However, on 30 September 2030, Williams decided that she is dissatisfied with the sound system and arranges to replace it. DJ Hi-Fi is again the supplier and they provided the following document.



999 Aviation Road
Point Cook 3030
ABN 21 546 434 379

ACCOUNT Kat's Boutique
27 Palm Beach Avenue
Brighton VIC 3186

TAX INVOICE 65
DATE 30/9/25

ITEM	QTY	COST	GST	TOTAL
Megablast system	1	\$9 000	\$900	\$9 900
Installation charge		\$1 000	\$100	\$1 100
Subtotal				\$11 000
Less: Trade-in allowance				\$4 000
Amount owing				\$7 000

Paid in full – thank you for your business!

Williams thinks the new Megablast system will be much better than the previous one. She expects to use it for five years, before selling it for about \$1500. She paid the amount outstanding to DJ Hi-Fi on 30 September 2030.

- Prepare the general journal entries required to record the disposal of the sound system on 30 September 2030.
- Prepare the following general ledger accounts for the period 1 September 2028 to 30 September 2031, including details of both the old and the new sound systems:
 - Sound System
 - Accumulated Depreciation of Sound System
 - Disposal of Sound System
 - Profit (or Loss) on Disposal of Sound System.

CASE STUDY

Greensborough Garden Supplies is a small business owned and managed by Matthew Decker. Decker has purchased a number of forklifts over the years to help him move heavy items around his storage yard. His policy is to depreciate the forklifts at the rate of 25% per annum, using the reducing balance method. If the forklifts become unreliable, Decker replaces them immediately, because they are crucial to the running of his business. This business makes its cash payments using EFT.

- » The following is a summary of the purchases and sales of Decker's forklifts over the years:
- Forklift #1: Purchased on 1 April 2028 for \$15 000 cash, plus GST of \$1500. Insurance cost is \$200 per annum.
 - Forklift #2: Purchased on 31 October 2028 for \$19 800 cash (including GST). Insurance cost is \$250 per annum.
 - Forklift #3: Purchased on 30 June 2029 as a replacement for forklift #1, which keeps breaking down. The supplier, Dynamic Forklifts, granted a trade-in allowance of \$9000. The purchase price of the new forklift is \$19 000 (plus GST), but modifications are required and these cost an additional \$1500 (plus GST). Insurance cost is \$300 per annum.
 - Forklift #4: Forklift #2 is now becoming unreliable, so it is traded in for \$13 500 on forklift #4 on 1 September 2030. Dynamic Forklifts issued a receipt with a cost price of \$22 000, plus GST of \$2200, less the agreed trade-in. Insurance is \$400 per annum. Decker arranges a maintenance contract at a cost of \$500 per year. He takes out a loan of \$7000 from EZ Bank to help with the purchase of the latest forklift.
- Using a spreadsheet, prepare a table to calculate the amount of depreciation expense that would be shown in the income statements for the years ended 31 December 2028, 2029 and 2030.
 - On your spreadsheet, prepare extracts from the balance sheets prepared as at 30 June 2028, 2029 and 2030 to show how the asset Forklifts would be reported in each of these three years.
 - Prepare the Disposal of Forklift account with all entries in relation to:
 - forklift #1
 - forklift #2.
 - Depreciation and disposal of non-current assets are both affected by several accounting assumptions and/or qualitative characteristics. State and explain the assumptions and characteristics that are related to this area over the life of a non-current asset.



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EXAM-STYLE QUESTIONS

Question 1 (4 marks)

Equipment that was purchased for cash on 1 March 2028 for \$17 600 (including GST) has been depreciated at the rate of 15% using the reducing balance method. On 30 June 2029, the asset was sold for \$9000 cash, plus GST. Balance day for this business is 30 June each year. **Prepare** all general journal entries required to record the disposal of the equipment on 30 June 2029.

Question 2 (8 marks)

On 25 June 2028, Lush Furniture Store took out an \$18 000 loan from NAB to help it purchase a delivery van. On 1 July 2028, it purchased the van for \$35 000 cash, plus GST. The owner of the business planned to use the van for five years before selling it for about \$7000. On 30 June 2032, the owner decided to update the vehicle and traded in the old one and received an allowance of \$8000. The purchase price of the new van was \$38 000, plus GST.

- Prepare** the general journal entries required on 25 June and 1 July 2028 to record both the receipt of cash from the loan and the purchase of the delivery van. (4 marks)
- Prepare** the Disposal of Van account, with all relevant entries on 30 June 2032. (4 marks)

Question 3 (2 marks)

Explain the circumstances that exist when a loss on disposal occurs.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 18

15 16 17 18 19 20 21 22 23

Balance day adjustments: Part 1

KEY TERMS

Accrual accounting
Balance day adjustments
Adjusting entry
Closing entry
Prepaid expenses
Accrued expenses
Adjusted trial balance

In this chapter and in Chapter 19, you will learn how to adjust and update ledger accounts on balance day, in order to calculate a business's profit (or loss) for the period.

Learning objectives

By the end of this chapter, you will be able to:

- **outline** the period assumption and its relationship with balance day adjustments [18.1]
- **explain** the need for balance day adjustments under the accrual method of accounting [18.1]
- **describe** the role of adjusting and closing entries [18.1]
- **record** entries in the general journal for prepaid expenses using the asset approach [18.2]
- **record** entries in the general journal for accrued expenses [18.3]
- **describe** the treatment of accrued expenses in a subsequent period when payment is made [18.3]
- **record** adjustments for inventory losses and inventory gains [18.4]
- **prepare** ledger accounts incorporating balance day adjustments [18.6]
- **describe** the twofold effect that balance day adjustments have on final accounting reports [18.6]
- **calculate** profit under the accrual method of accounting [18.6]

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 4: Double entry recording: An introduction

CHAPTER 5: The general journal and the general ledger

CHAPTER 10: Closing the general ledger

CHAPTER 11: Income statements



Estimated time required: 2 weeks





18.1 Profit determination: Underlying assumptions

Before you learn how to determine profit, it's important to understand the accounting rules and assumptions on which profit determination is based. (You'll already know about some of these from earlier in this book.)

The first of these is the *going concern assumption*, which assumes that the business will continue to operate as a going concern for an indefinite period into the future. The going concern assumption allows accountants to report in a balance sheet non-current assets that they believe will have some future economic value to the business.

However, there is little value in waiting until a business is wound up before reporting on its activities. Performance needs to be reported on a periodic basis. The *period assumption* was created to meet this need. This assumption divides the indefinite life of a business into periods of time over which its performance (i.e. profit or loss) can be measured. The maximum period of time is one year, due to taxation requirements. The last day of the period is referred to as balance day. After the period is decided, the qualitative characteristic of *relevance* is applied to determine which revenue and expenses will be included in calculating an accurate profit or loss figure.

Accrual accounting

accrual accounting a system of determining profit where revenue earned is matched with expenses incurred; any difference is the profit (or loss) for the period

This chapter is based on the accrual basis of accounting, where profit is defined as revenue earned less the expenses incurred in earning that revenue. **Accrual accounting** recognises that a business can earn revenue in one period but actually receive the cash in a previous or subsequent period. It also recognises that some cash payments relate to items owing from a previous period or are paid in advance for a future period.

The accrual method of accounting attempts to measure the revenue and expenses that belong to the same period of time.

The following transactions apply accrual accounting to practical examples. All the examples are for Artisan Jeans, a business that uses 31 December as its balance day.

EXAMPLE 18.1

Sales invoices for goods sold during December totalled \$10 000. On 31 December, only \$2000 of this amount had been received in cash.

Under accrual accounting: Sales revenue = \$10 000, as this amount was earned in the current period. The whole \$10 000 is recognised as revenue, even though \$8000 hasn't yet been received. This is because the revenue-earning process has been completed and there is objective evidence of the amount of revenue earned (the invoices). As long as these two requirements are satisfied, revenue may be recognised as being earned under accrual accounting.

EXAMPLE 18.2

On 1 July, a yearly insurance premium of \$2000 was paid.

Under accrual accounting: Insurance expense = \$1000, as only half of the insurance payment has been incurred (or expired) during the current period. The other \$1000 will be recognised as an expense in the following period.



EXAMPLE 18.3

Advertising paid this year totalled \$4000, with \$1000 of this amount relating to advertising that was done during the previous period.

Under accrual accounting: Advertising expense = \$3000, as this is the amount of expense that belongs to the current period. It ignores the other \$1000, which was incurred before the current period.

Balance day adjustments

At the end of a period, a trial balance is prepared to check the accuracy of the double entries made during the period. When this process is completed, accounting reports can then be prepared. In order to comply with the demands of accrual accounting, the figures in the trial balance must equal the revenue earned and the expenses incurred.

However, often the accounts will only reflect the cash flows that took place during the period. Some of these cash flows may relate to revenues and expenses associated with the previous or subsequent periods. **Balance day adjustments** are used to adjust the balances of revenue and expense accounts so that they equal the amounts of revenue earned and expenses incurred.

Two types of entries are made in general ledger accounts via the general journal.

- **Adjusting entries** are used in revenue and expense accounts to make them equal to revenue earned and expenses incurred. Adjusting entries are made on the last day of the period – that is, on balance day.
- **Closing entries** are used to close off the adjusted revenue and expense accounts to the Profit and Loss Summary account. Closing entries are also made on balance day.

balance day adjustments

adjustments made to revenue and expense accounts at the end of a period so that they equal revenue earned and expenses incurred

adjusting entry

a general journal entry used to adjust revenue and expense accounts (see balance day adjustments)

closing entry

a general journal entry used to close off a revenue or expense account

18.2 Prepaid expenses



An *asset* is a resource under the control of an entity that has future economic benefits. An *expense* is the consumption or loss of economic benefits, which leads to a decrease in owner's equity. When a business pays for an item in advance, it poses the question: does the item represent an asset or an expense?

Consider the case of Preston Pet-Smart, which pays a \$480 12-month insurance premium in advance on 1 October 2028. What is the double entry for such a transaction?

- The credit entry is clear: as Cash at Bank has decreased, it must be credited.
- There are two possibilities for the debit entry: the initial payment could be treated as an asset or as an expense.

This \$480 insurance premium appears to qualify as an asset – it's controlled by the entity and has future economic benefits. Therefore, it should be recorded as an asset when the transaction occurs on 1 October 2028.

However, insurance is normally referred to as an expense in accounting, even though it doesn't satisfy the definition of an expense because it's paid in advance and hasn't yet been consumed. To avoid confusion, an expense paid in advance is referred to as a **prepaid expense**.

A prepaid expense exists when a payment relates to a future economic benefit because the item hasn't yet been consumed. For example, if wages are paid at the end of the working week, they are treated as an expense because their entire economic benefit is used up. If insurance (or any other expense) is paid in advance, the economic benefit is *yet to be used*, so an asset has been created.

prepaid expenses expenses paid during a period but not yet used

Prepaid expenses on balance day

Having decided to record the insurance payment in an asset account (Prepaid Insurance), the problem then switches to balance day. If Preston Pet-Smart closes its books on 31 December, how much insurance should it take into account?

Accrual accounting requires that only the *relevant* amount of insurance expense is deducted from the period's revenue to determine an accurate profit, but the insurance payment was debited to an asset account. Therefore, the next step is to transfer the amount of expense that has been used up or has expired out of the asset account.

The following summary is prepared using the details of Preston Pet-Smart's \$480 insurance payment.

With a prepaid expense, always consider how much has been used up and how much hasn't yet been used.

1 October 2028	Insurance paid: \$480 (which equals a cost of \$40 per month)
31 December 2028	Insurance expense incurred in 2028 (three months used): $3 \times \$40 = \$120$
31 December 2028	Prepaid insurance for 2029 (nine months not used): $9 \times \$40 = \$360$

As Pet-Smart paid the insurance on 1 October for 12 months in advance, only three months has expired before balance day (31 December). Therefore, only a quarter (\$120) of the total payment should be treated as an expense. The other \$360 remains as an asset, as it still has future economic benefit for the business.

The Prepaid Insurance Expense account is shown as follows, with both the original cash payment and the necessary adjusting entry to Insurance Expense on 31 December.

PREPAID INSURANCE EXPENSE

		\$			\$
2028			2028		
1 Oct	Cash at bank	480	31 Dec	Insurance expense	120

INSURANCE EXPENSE

		\$			\$
2028					
31 Dec	Prepaid insurance expense	120			

As some of the insurance paid has now been used, it's removed from the asset account by the credit entry and transferred to the expense account (Insurance Expense) on balance day. The balance of the Prepaid Insurance Expense account is now \$360 (\$480 – \$120), which is the economic benefit remaining as at 31 December 2028.



The Insurance Expense account is now ready for closing to the Profit and Loss Summary account. As the Prepaid Insurance Expense account is an asset, it's balanced in the usual way. The following entries show the closing and balancing of these two accounts.

PREPAID INSURANCE EXPENSE

		\$			\$
2028			2028		
1 Oct	Cash at bank	480	31 Dec	Insurance expense	120
			31 Dec	Balance	360
		480			480
2029					
1 Jan	Balance	360			

INSURANCE EXPENSE

		\$			\$
2028			2028		
31 Dec	Prepaid insurance expense	120	31 Dec	P&L summary	120

The expense account is now closed and the amount of expense incurred in the current period (\$120) has been transferred to the Profit and Loss Summary account. The amount of insurance not yet used (\$360) remains in the Prepaid Insurance Expense account and will be reported in the balance sheet as a current asset.

As with all general ledger recordings, the adjusting and closing entries are recorded in the general journal first, and then in the general ledger. Using the data from the above example, the general journal entries would be prepared as shown in Figure 18.1.

Figure 18.1 Adjusting and closing entries for a prepaid expense

GENERAL JOURNAL

Date	Details	Dr	Cr
2028			
31 Dec	Insurance expense	120	
	Prepaid insurance expense		120
	Adjusting entry for three months' insurance incurred		
31 Dec	P&L summary	120	
	Insurance expense		120
	Closing entry		

When preparing an adjusting entry for a prepaid expense, always debit the expense account.

Keep in mind that when a business pays expenses (including prepaid expenses), it may also have to pay GST. Expenses such as wages and interest don't include GST, but most other expenses do attract this form of taxation.

In the case of Preston Pet-Smart, the annual insurance premium paid was \$480. When the 10% GST is applied to this amount, the business actually pays a total of \$528 (\$480 for the expense, plus \$48 GST).

The payment for prepaid insurance would be recorded in the general journal as shown in Figure 18.2.

Figure 18.2 Journal entry to record the payment of a prepaid expense

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Oct 2028	Prepaid insurance expense	480	
	GST clearing	48	
	Cash at bank		528

EXAM-STYLE QUESTION

At the end of a period, a business had a Prepaid Insurance account with a balance of \$4000. The owner has advised that \$600 of this amount of insurance hasn't yet been used. If the relevant adjusting entry isn't made, what effect would this have on the balance sheet of this business?)

Complete the following table to show the effect of this omission.
(Show dollar amounts where applicable.)

(3 marks)

Item	Overstated/understated/no effect	\$
Assets		
Liabilities		
Owner's equity		

Sample answer

Item	Overstated/understated/no effect	\$
Assets	<i>Overstated</i>	<i>3 400</i>
Liabilities	<i>No effect</i>	
Owner's equity	<i>Overstated</i>	<i>3 400</i>

Exam advice

Balance day adjustments can be examined in a variety of ways. You may be asked to prepare adjusting entries in the general journal or to complete ledger accounts with all relevant entries. Sometimes you may be provided with a table, such as the example shown here. Always use the titles provided in the headings of the table and, in this case, recognise the dollar value of insurance expense for the period. As the question stated that \$600 of insurance hasn't yet been used, the effect on the balance sheet would be that \$3400 of insurance should have been transferred out of the Prepaid Insurance account and moved to the Insurance Expense account. Therefore, assets would be overstated. Owner's equity would also be overstated, as net profit would be overstated by \$3400.

In this type of question, you may sometimes be given the amount of expense for the period or the balance of the Prepaid Expense account. *Always* read the question very carefully so that you fully understand what has taken place in the books of the business.

18.3 Accrued expenses



An expense account may include several cash payments for expenses paid during the period, but there may be additional outstanding accounts on balance day. If these costs were incurred in the current period, they should be included in profit calculations for the current period.

Consider the case of Abbotsford Archery Supplies, which paid \$800 for advertising during 2028. On 31 December, the business owes another \$200 for advertising completed during December. In this case, the cost incurred for advertising during 2028 is \$1000, but the balance of the Advertising Expense account in the trial balance would only be \$800 before adjustments have been entered.

The Advertising Expense account has been prepared as shown and includes the necessary balance day adjustment.

ADVERTISING EXPENSE

2028		\$			\$
Jan-Dec	Cash at bank	800			
31 Dec	Accrued advertising expense	200			

When adjusting for an accrued expense, always debit the expense account.

ACCRUED ADVERTISING EXPENSE

		\$	2028		\$
			31 Dec	Advertising expense	200

The adjusting entry for an accrued expense creates a current liability.

The adjusting entry for the **accrued expense** has the following features:

- The debit entry increases the expense account so that it equals the total cost incurred for the period (i.e. \$1000).
- It creates a liability on balance day in the form of the Accrued Advertising Expense account.

accrued expense expense that has been incurred during a period but not yet paid, remaining as a liability on balance day

Recording accrued expenses

In the above case, Abbotsford Archery Supplies owes \$200 as at 31 December. As this \$200 is a present obligation resulting from a past event, it should be reported as a liability. As this type of debt would usually be paid within a short period of time (perhaps 30 or 60 days), it's classified as a current liability.

The closing entry is entered as usual on the credit side of the expense account. It transfers the advertising expense for the period (\$1000) to the Profit and Loss Summary account on balance day.

ADVERTISING EXPENSE

2028		\$	2028		\$
Jan-Dec	Cash at bank	800			
31 Dec	Accrued advertising expense	200	31 Dec	P&L summary	1 000
		1 000			1 000

The general journal entries required for the adjusting and closing entries for accrued advertising are shown in Figure 18.3.

Figure 18.3 Adjusting and closing entries for an accrued expense

Always debit the expense!

GENERAL JOURNAL			
Date	Details	Dr	Cr
2028			
31 Dec	Advertising expense	200	
	Accrued advertising expense		200
	Adjusting entry for advertising owing		
31 Dec	P&L summary	1 000	
	Advertising expense		1 000
	Closing entry		

Accrued expenses in subsequent periods

It's important to consider the treatment of accrued expenses in the subsequent period. For Abbotsford Archery Supplies, an Accrued Advertising Expense account was created for advertising owing on balance day. The \$200 listed as owing at that time would be reported in the balance sheet as a current liability. This item would be paid sometime in the early stages of the next period (e.g. 5 January).

When the amount owing is paid off, *don't* record it as an expense in the new period. The double entry shown in Figure 18.4 achieves this. (The related GST payment has also been included.)

Figure 18.4 Payment of an accrued expense in the subsequent period

GENERAL JOURNAL			
Date	Details	Dr	Cr
2029			
5 Jan	Accrued advertising expense	200	
	GST clearing	20	
	Cash at bank		220
	Payment of accrued advertising from previous period via EFT		

It's vital to debit the payment of \$200 to accrued advertising and *not* to advertising expense. This will avoid counting the advertising payment as an expense twice.

When creating the account on balance day, use a specific title such as 'Accrued Advertising Expense', rather than the generic term 'Accrued Expenses'. This allows the expense that's owing to be easily identified; when it's paid off in the new period, the accrued account can be eliminated.

When the cash payment is made, the Accrued Advertising Expense account will appear as follows.

ACCRUED ADVERTISING EXPENSE					
		\$			\$
2029			2028		
5 Jan	Cash at bank	200	31 Dec	Advertising expense	200

Splitting up accrued expenses in subsequent periods

In the previous example, \$200 was owing for advertising from the previous period. This amount was then paid off during January. However, what happens if \$500 (plus GST of \$50) was paid for advertising on 5 January, including the \$200 owing as at 31 December?

This \$500 can be broken down into two parts:

- The amount owing from last period is \$200.
- The remaining \$300 relates to advertising expense for the new period.

It's important to record the two amounts accurately. First, close off the \$200 owing in the liability account. Then record the other \$300 in the Advertising Expense account as usual (see Figure 18.5).

Figure 18.5 Payment of an accrued expense in the subsequent period, with an additional expense also being paid

GENERAL JOURNAL			
Date	Details	Dr	Cr
2029			
5 Jan	Accrued advertising expense	200	
	Advertising expense	300	
	GST clearing	50	
	Cash at bank		550

When the one payment of \$500 is paid for advertising (plus GST), it's important to record this payment correctly in the journal. Split the total amount between the payment of the liability and the payment of the expense. This eliminates the liability owing from the previous period (i.e. \$200) and records the expense incurred in relation to the new period (\$300 in the expense account).



Payments of liabilities and expenses must be recorded separately.

The total amount of GST paid, \$50, is also recorded at this time.

ACCruED ADVERTISING EXPENSE

		\$			\$
2029					
5 Jan	Cash at bank	200	31 Dec	Advertising expense	200

ADVERTISING EXPENSE

		\$			\$
2029					
5 Jan	Cash at bank	300			

GST CLEARING

		\$			\$
2029					
5 Jan	Cash at bank	50			

EXAM-STYLE QUESTION

The following information was extracted from a trial balance prepared on 30 September 2028:

Wages expense \$24 000
Prepaid insurance \$6 000

Since the last pay day, the employees of this business have earned wages of \$2000, which will be paid in the first week of October. The prepaid insurance of \$6000 was paid on 15 June 2028 for a 12-month policy, commencing on 1 July 2028.

Prepare adjusting entries in the general journal on 30 September for both wages and insurance expense. Narrations are not required. (4 marks)

Sample answer

GENERAL JOURNAL

Date	Details	Dr	Cr
30 Sep 2028	Wages	2 000	
	Accrued wages expense		2 000
	Insurance expense	1 500	
	Prepaid insurance expense		1 500

Exam advice

Questions on balance day adjustments often ask students to prepare adjusting entries in the general journal. Sometimes there may be five or six double entries like the two shown here. Remember always to debit the expense account in an adjusting entry. Use the correct titles and double check that you have determined the dollar value of the adjustment accurately.

Don't take short cuts in the general journal! For example, don't use generic titles such as 'Accrued Expenses'. This isn't an acceptable title for the ledger account in relation to the wages owing. 'Prepaid Expense' is also not acceptable in relation to the prepaid insurance. Always name the expense being adjusted in each journal entry.

18.4 Inventory losses and gains



Accounting for inventory losses and gains was covered in Chapter 7, but it's important to realise that such entries are also balance day adjustments.

Adjustment for an inventory loss

Physical stocktakes are carried out on balance day. If necessary, an adjustment for an inventory loss is also done at this time. Consider the following details.

31 Dec	Balance of the Inventory account	\$45 000
	Value determined by the physical stocktake	\$42 500

In this situation, an inventory loss of \$2500 has occurred. A balance day adjustment is required to decrease the balance of the Inventory account to its correct figure. The adjustment also creates an expense account, Inventory Loss, as the business has consumed economic benefits (although unintentionally) to the value of \$2500.

The adjusting entry required is shown in Figure 18.6.

Figure 18.6 Adjusting entry for an inventory loss

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec	Inventory loss	2 500	
	Inventory		2 500

Adjustment for an inventory gain

The other possible balance day adjustment required is to account for an inventory gain. Consider the following details.

31 Dec	Balance of the Inventory account	\$45 000
	Value determined by the physical stocktake	\$46 000

In this situation, an inventory gain of \$1000 has occurred. A balance day adjustment is required to increase the balance of the Inventory account to its correct figure. The adjustment also creates a revenue account in the form of Inventory Gain, as the business has had an inflow of resources to the value of \$1000.

It could be argued that inventory gains are merely an adjustment to expenses, as this type of gain often occurs because of recording or stocktaking errors. However, an inventory gain may also occur when a supplier oversupplies goods. Although such an event should be detected when goods are delivered, it may be missed and may go undetected throughout the period.

The effect of oversupply is that the business has unintentionally experienced an inflow of economic resources, which qualifies as a revenue item. Thus, inventory gains should be recognised as revenue and must be adjusted for on balance day.



The adjusting entry to record an inventory gain of \$1000 is shown in Figure 18.7.

Figure 18.7 Adjusting entry for an inventory gain

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec	Inventory	1 000	
	Inventory gain		1 000



18.5 Extended example: Adjusting and closing entries

This extended example demonstrates the processes involved in recording adjusting and closing entries for a small business, Supreme Trading Store. A trial balance has been prepared, and this is followed by a series of balance day adjustments to be recorded on 30 June 2028.

SUPREME TRADING STORE: TRIAL BALANCE AS AT 30 JUNE 2028

	\$		\$
Prepaid insurance expense	2 280	Sales revenue	121 000
Interest expense	9 000	Accumulated depreciation – office furniture	540
Inventory	55 000	Loan – NAB	183 000
Advertising expense	2 600	Capital	676 120
Telephone expense	780	Interest revenue	200
Drawings	8 000	Accounts payable	12 000
Wages	48 000	GST clearing	2 000
Term deposit (maturing 30/6/29)	6 000	Allowance for doubtful debts	1 000
Cash at bank	2 500		
Accounts receivable	10 100		
Cost of sales	47 000		
Sales returns	1 000		
Office furniture	3 600		
Premises	800 000		
	995 860		995 860

Adjustments required:

- Insurance expense for the year: \$2000.
- Inventory on hand as at 30 June 2028: \$54 600 (Memo 36).
- B Broak, an accounts receivable who owes \$990, to be written off as a bad debt (Memo 37).
- The allowance for doubtful debts to be increased to \$1200 (Memo 38).
- Advertising owing: \$300.
- Depreciation – office furniture: 10% per annum on cost.

General journal

The following adjusting and closing entries to account for the balance day adjustments are recorded in the general journal.

Date	Details	Dr	Cr
2028			
30 Jun	Insurance expense	2 000	
	Prepaid insurance expense		2 000
	Adjusting entry for insurance incurred		
	Inventory loss	400	
	Inventory		400
	Adjusting entry for inventory loss identified by physical stocktake (Memo 36)		
	GST clearing	90	
	Allowance for doubtful debts	900	
	Accounts receivable		990
	Account: B Broak written off as bad debt (Memo 37)		
	Bad debts	1 100	
	Allowance for doubtful debts		1 100
	Adjusting entry to increase allowance for doubtful debts to \$1200 (Memo 38)		
	Advertising expense	300	
	Accrued advertising expense		300
	Adjusting entry for advertising owing		
	Depreciation – office furniture	360	
	Accumulated depreciation – office furniture		360
	Adjusting entry for depreciation: 10% on cost		
	Sales	121 000	
	Interest revenue	200	
	Sales returns		1 000
	P&L summary		120 200
	Closing entries		
	P&L summary	111 540	
	Insurance		2 000
	Interest expense		9 000
	Advertising expense		2 900
	Telephone expense		780
	Wages		48 000
	Cost of sales		47 000
	Inventory loss		400
	Bad debts		1 100
	Depreciation of office furniture		360
	Closing entries		
	P&L summary	8 660	
	Capital		8 660
	Transfer of net profit		
	Capital	8 000	
	Drawings		8 000
	Transfer of owner's drawings		

General ledger

These general journal entries must now be posted to general ledger accounts.

The accounts involved in the profit determination process are shown below, along with the items from the balance sheet that are affected by the adjusting entries.

SALES REVENUE

		\$			\$
30 Jun	P&L summary	121 000	Jul-Jun	Cash at bank	121 000

PREPAID INSURANCE

		\$			\$
Jul-Jun	Cash at bank	2 280	30 Jun	Insurance expense	2 000
				Balance	280
		2 280			2 280
1 Jul	Balance	280			

INSURANCE EXPENSE

		\$			\$
30 Jun	Prepaid insurance expense	2 000	30 Jun	P&L summary	2 000

INTEREST EXPENSE

		\$			\$
Jul-Jun	Cash at bank	9 000	30 Jun	P&L summary	9 000

INVENTORY

		\$			\$
30 Jun	Balance	55 000	30 Jun	Inventory loss	400
				Balance	54 600
		55 000			55 000
1 Jul	Balance	54 600			

INVENTORY LOSS

		\$			\$
30 Jun	Inventory	400	30 Jun	P&L summary	400

ADVERTISING EXPENSE

		\$			\$
Jul-Jun	Cash at bank	2 600			
30 Jun	Accrued advertising expense	300	30 Jun	P&L summary	2 900
		2 900			2 900

ACCRUED ADVERTISING EXPENSE

		\$			\$
			30 Jun	Advertising expense	300

WAGES

		\$			\$
Jul-Jun	Cash at bank	48 000	30 Jun	P&L summary	48 000

TELEPHONE EXPENSE

		\$			\$
Jul-Jun	Cash at bank	780	30 Jun	P&L summary	780

COST OF SALES

		\$			\$
Jul-Jun	Inventory control	47 000	30 Jun	P&L summary	47 000

INTEREST REVENUE

		\$			\$
Jul-Jun	P&L summary	200	Jul-Jun	Cash at bank	200

ACCOUNTS RECEIVABLE

		\$			\$
30 Jun	Balance	10 100	30 Jun	GST clearing	90
				Allowance for doubtful debts	900
				Balance	9 110
		10 100			10 100
1 Jul	Balance	9 110			

ALLOWANCE FOR DOUBTFUL DEBTS

		\$			\$
30 Jun	Accounts receivable	900	30 Jun	Balance	1 000
	Balance	1 200	30 Jun	Bad debts expense	1 100
		2 100			2 100
			1 Jul	Balance	1 200

BAD DEBTS

		\$			\$
30 Jun	Allowance for doubtful debts	1 100	30 Jun	P&L summary	1 100

DEPRECIATION - OFFICE FURNITURE

		\$			\$
30 Jun	Accumulated depreciation - office furniture	360	30 Jun	P&L summary	360

ACCUMULATED DEPRECIATION - OFFICE FURNITURE

		\$			\$
			30 Jun	Balance	540
30 Jun	Balance	900		Depreciation - office furniture	360
		900			900
			1 Jul	Balance	900

PROFIT AND LOSS SUMMARY

		\$			\$
30 Jun	Expense accounts	111 540	30 Jun	Revenue accounts	120 200
	Capital	8 660			
		120 200			120 200

CAPITAL

		\$			\$
30 Jun	Drawings	8 000	30 Jun	Balance	676 120
	Balance	676 780		P&L summary	8 660
		684 780			684 780
			1 Jul	Balance	676 780

DRAWINGS

		\$			\$
Jul–Jun	Cash at bank	8 000	30 Jun	Capital	8 000

Income statement and balance sheet

The ledger accounts above include the adjusting and closing entries for all the balance day adjustments required. It's important to be able to trace the double entry for each of the adjustments through to the preparation of the Profit and Loss Summary account.

Once all the processes required on balance day have been completed, the financial reports can be prepared in the usual way. The income statement and the balance sheet for Supreme Trading are shown.

SUPREME TRADING STORE: INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2028

	\$	\$
Revenue		
Sales revenue	121 000	
Less: Sales returns	1 000	120 000
Less: Cost of sales		47 000
Gross profit		73 000
Less: Inventory loss		400
Adjusted gross profit		72 600
Other revenue		
Interest revenue		200
		72 800
Less: Other expenses		
Insurance	2 000	
Interest expense	9 000	
Advertising	2 900	
Telephone	780	
Wages	48 000	
Bad debts	1 100	
Depreciation – office furniture	360	64 140
Net profit		8 660

SUPREME TRADING STORE: BALANCE SHEET AS AT 30 JUNE 2028

Current assets	\$	\$	\$	Current liabilities	\$	\$	\$
Cash at bank		2 500		Accounts payable		12 000	
Accounts receivable	9 110			Accrued advertising		300	
Less: Allowance for doubtful debts	1 200	7 910		GST clearing		1 910	14 210
Inventory		54 600		Non-current liabilities			
Term deposit		6 000		Loan – NAB			183 000
Prepaid insurance		280	71 290				
Non-current assets				Owner's equity			
Office furniture	3 600			Capital	676 120		
Less: Accumulated depreciation	900	2 700		Net profit	8 660	684 780	
Premises		800 000	802 700	Less: Drawings		8 000	676 780
			873 990				873 990

These two accounting reports have been prepared under the *accrual method* of accounting. The revenues and expenses reported in the income statement represent the revenues earned and expenses incurred during the period. This also means that the dollar values shown are after adjustments have been made to the accounts.

Inventory losses or gains are listed immediately after gross profit has been determined. This figure is called *adjusted gross profit*. If the business has earned revenue in addition to its cash and credit sales of inventory items, it is listed after the adjusted gross profit figure. Deduct the other expenses of the business from this new subtotal to determine the final net profit figure.

The balance sheet states the assets and liabilities after the adjustments are made. Accrued expenses represent obligations of the business as at 30 June 2028, and are therefore reported as liabilities. Note that the Inventory account has been adjusted for the inventory loss revealed by the physical stocktake. The term deposit (maturing 30 June 2029) is classified as a current asset, because it's expected to be turned into cash within the next 12 months.

Note that every balance day adjustment in this extended example affected an item in both financial reports. This situation will always occur because an adjustment must affect a revenue or expense account as well as an asset or liability. Such adjustments are necessary under accrual accounting to meet the demands of both *relevance* and the *period assumption*.

When all adjustments have been recorded, the result is a more accurate profit figure for the firm and a more accurate statement of its financial position.



Recording adjustments makes for a more accurate profit figure.



18.6 The adjusted trial balance

adjusted trial balance

a trial balance prepared after the recording of balance day adjustments has been completed

A trial balance prepared at the end of a period ensures that the double entries made during the period are accurate. Once this has been checked, balance day adjustments are entered into the books. You can prepare a second trial balance to ensure this process has been done correctly.

An **adjusted trial balance** is prepared after balance day adjustments have been entered in the accounts. As all adjustments are included, the same data that is used to prepare the final reports is used in an adjusted trial balance.

Using the data as stated previously for Supreme Trading Store, the adjusted trial balance would be prepared as shown.

SUPREME TRADING STORE: ADJUSTED TRIAL BALANCE AS AT 30 JUNE 2028

	\$		\$
Prepaid insurance expense	280	Sales revenue	121 000
Interest expense	9 000	Accumulated depreciation – office furniture	900
Inventory	54 600	Loan – NAB	183 000
Advertising	2 900	Capital	676 120
Telephone expense	780	Interest revenue	200
Wages	48 000	Accrued advertising expense	300
Term deposit	6 000	GST clearing	1 910
Cash at bank	2 500	Accounts payable	12 000
Accounts receivable	9 110	Allowance for doubtful debts	1 200
Cost of sales	47 000		
Sales returns	1 000		
Office furniture	3 600		
Drawings	8 000		
Premises	800 000		
Insurance expense	2 000		
Inventory loss	400		
Bad debts	1 100		
Depreciation – office furniture	360		
	996 630		996 630



Always check the data presented for report presentation, as a trial balance contains completely different data from that used for an adjusted trial balance.

An income statement should be based on adjusted revenue and expense accounts. Therefore, an adjusted trial balance provides the required information. However, if a pre-adjustment trial balance is the only information available, always process the appropriate balance day adjustments first. Once you have made those adjustments, you can prepare the final accounting reports to determine an accurate profit figure for the period.



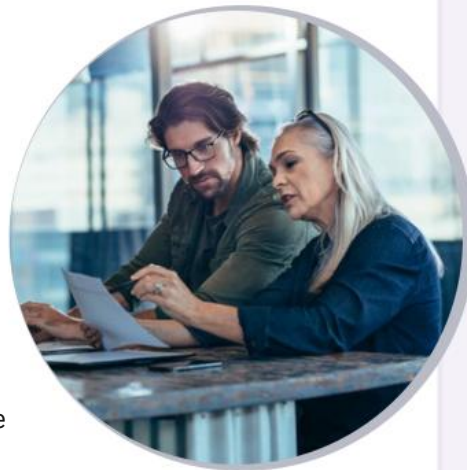
Practise and apply

18



REVISION: SUMMARY OF KEY CONTENT

- [18.1]** Balance day adjustments adjust the balances of revenue and expense accounts so that they equal the revenue earned and expenses incurred. Such adjustments make it possible to create an accurate trial balance that reflects more than just cash flows.
- [18.1]** Adjusting entries are made in revenue and expense accounts to make them equal to revenue earned and expenses incurred. Closing entries are used to close off the adjusted revenue and expense accounts to the Profit and Loss Summary account.
- [18.2]** A prepaid expense exists when a payment relates to a future economic benefit because the item hasn't yet been consumed. On balance day, the relevant amount of expense is deducted from the period's revenue in order to determine an accurate profit. The remaining amount is retained as an asset.
- [18.3]** Accrued expenses are those that have been incurred during a period but not yet paid. They remain as liabilities on balance day and must be recorded as such. When the amount owing is paid off, it should not be recorded as an expense in the new period.
- [18.4]** Physical stocktakes are carried out on balance day. If necessary, an adjustment for an inventory loss or gain is also done at this time.
- [18.6]** At the end of a period, a trial balance is prepared to ensure the accuracy of the double entries made. Once this is checked, balance day adjustments may be entered into the books. An adjusted trial balance is prepared after balance day adjustments have been entered in the accounts.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Preparation of an income statement

Ben Nguyen is the proprietor of Nguyen Robotics. He commenced business on 1 July 2027 and supplies the following information regarding his first year of business.

- Sales charged to customers totalled \$120 000. All of this amount, less \$15 000, was received prior to 30 June 2028.
- Cost of sales for the year was \$54 000.
- Advertising paid was \$4000. An account for \$1000 for advertising completed during June 2028 hasn't yet been paid.
- Insurance paid during the year was \$3600, of which \$400 relates to the period July–September 2028.
- Office expenses for the year were \$8000 and were all paid by 30 June 2028.
- The business premises were rented at a cost of \$4000 per month. A total of \$52 000 was paid during the year for rent.

- a Prepare an income statement under the accrual method of accounting for the year ended 30 June 2028.
- b Prepare an extract from the firm's balance sheet, showing the current assets that would be reported on 30 June 2028 under accrual accounting as a result of the above information.



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2 Preparation of an income statement

Melissa Mercuri, owner of Kilmore Lighting, supplies the following information relating to the quarter ended 31 March 2028.

- Cost of sales for the quarter was \$22 000.
- Inventory loss amounted to \$300.
- A three-month advertising contract costing \$6000 was paid on 1 February 2028.
- Wages paid for the quarter totalled \$9000.
- A total of \$1000 of vehicle expenses were paid during the quarter. This included a yearly insurance premium of \$480 paid on 1 March 2028.
- Depreciation of equipment for the quarter was \$2000.
- Sales revenue earned was \$46 000, including \$5000 yet to be received.

Prepare an income statement for the quarter ended 31 March 2028 using the accrual method of accounting.

3 Preparation of an income statement

The manager of Dickenson's Books provides the following summary of the firm's transactions during 2028.

- Sales received totalled \$88 000.
 - Cost of sales for the year totalled \$42 000.
 - Wages paid to an assistant during the year were \$29 000. The employee earned a bonus of \$1000 during December but this hadn't been paid by balance day.
 - Depreciation of equipment for the year was \$1200.
 - Depreciation of office furniture was \$800.
 - Inventory as per stocktake was \$22 000; balance of Inventory account was \$19 800.
 - Insurance paid was \$1100. Prepaid insurance was \$300 at 1 January 2028 and \$400 at 31 December 2028.
 - Cleaning expenses paid totalled \$5200. On 31 December, an amount of \$300 was owing for cleaning.
- a** Prepare an income statement under the accrual method of accounting for the year ended 31 December 2028.
- b** List the items that would appear in the firm's balance sheet under the headings of 'Current assets' and 'Current liabilities', based on the information provided above.

4 Prepaid expenses: Basic

The owner of Caserta's Ice Skates paid \$120 000, plus GST of \$12 000, for six months' rent in advance on 1 May 2028. Balance day is on 30 June each year.

- a** State the double entry that would be made when the payment occurred on 1 May 2028.
- b** Prepare the adjusting and closing entries in the general journal that relate to the rent expense for the period that ends on 30 June 2028.
- c** Prepare the Prepaid Rent account and the Rent Expense account, with all relevant entries.
- d** Explain the purpose of the adjusting entry prepared in part **b** of this question.
- e** State and explain the effect on the firm's accounting reports if the balance day adjustment for rent wasn't done.

5 Prepaid expenses: Advanced

Max Kolbe is the proprietor of Splatter Paintball Supplies, a small business that owns three vehicles. The following ledger account records the yearly insurance premiums paid on these vehicles. The firm closes its books on 31 December each year.

PREPAID INSURANCE

2028		\$			\$
1 Jan	Balance	750			
1 Apr	Cash at bank	900			
30 Jun	Cash at bank	900			
1 Nov	Cash at bank	900			

- a** Calculate the insurance expense that would be reported under accrual accounting for the year ended 31 December 2028.
- b** Prepare the Prepaid Insurance account and the Insurance Expense account, and record the adjusting and closing entries that would be made on 31 December 2028 if this firm used accrual accounting.
- c** Explain the link between the adjusting entry prepared in part **b** and the qualitative characteristic of relevance.
- d** How is the balance sheet affected by the adjusting entry prepared in part **b**?



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6 Accrued expenses: Basic

Rosehill Trading paid a total of \$4200 for equipment repairs during 2028. On 31 December 2028, the business still had an unpaid account for \$1300 for repairs done during December.

- Prepare adjusting and closing entries in the general journal for repairs expense.
- Prepare the Equipment Repairs Expense account and the Accrued Equipment Repairs account with all relevant entries on 31 December 2028.
- Explain how the adjusting entry prepared in part **a** follows the period assumption.
- State and explain the effect on the firm's reports if the balance day adjustment wasn't recorded.
- On 31 January 2029, Rosehill Trading made a cash payment of \$1430 via EFT for equipment repairs. This amount included the \$1300 owing as at 31 December 2028, plus GST. Prepare the relevant entry in the general journal.
- Post the entry made in your general journal to the Accrued Equipment Repairs account.



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7 Accrued expenses: Advanced

Alphington All-Sports has an advertising contract with the local newspaper costing \$300 per month. During the year ended 30 September 2028, the business paid a total of \$3000. The accounts for August and September 2028 haven't yet been settled. The Advertising Expense account in the general ledger appears as shown.

ADVERTISING EXPENSE

2028		\$			\$
Oct–Sep	Cash at bank	3 000			

- State the amount of advertising expense that would be reported for the year ended 30 September 2028 under accrual accounting.
- Prepare the adjusting journal entry that would be made on 30 September 2028.
- Prepare the Advertising Expense account in the general ledger, including the required adjusting and closing entries.
- State the twofold effect of the adjusting entry on the balance sheet.
- On 31 October 2028 the business made a cash payment of \$900, plus GST of \$90. The \$900 relates to advertising for the months of August, September and October. Record this event in the relevant ledger accounts.



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8 Bad debts: Basic

Highpoint Hardware made a credit sale to B Risker on 15 November 2027. The invoice price was \$550, plus \$55 GST, and this was entered into the Accounts Receivable account on 30 November 2027. The owner of Highpoint Hardware has chased Risker for payment for several months, without success. On balance day, 30 June 2028, the owner decides to write off the account as a bad debt, acting on advice that Risker has been declared bankrupt.

- Prepare the general journal entry required on 30 June 2028 to write off Risker's debt, given that the allowance for doubtful debts has a balance of \$1000.
- Explain how the writing off of an accounts receivable affects (i) the income statement, and (ii) the balance sheet.



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9 Bad debts: Advanced

The general ledger of Natural Nutrients included the accounts shown below. After trying to track down I Nikov for almost two years, the owner of Natural Nutrients received legal advice that Nikov has been declared bankrupt. His debts are to be paid at 15 cents for each dollar owed, and a bank cheque was enclosed as a final payment. The business owner has decided to write off the remainder of Nikov's balance as irrecoverable.





- a Prepare the adjusting entry required on 30 June 2028 to write off the Nikov account.
- b Prepare the Nikov account to show both the receipt of cash from Nikov and the writing off of his account.

ACCOUNTS RECEIVABLE: I NIKOV

2026		\$			\$
31 Mar	Credit sales/GST clearing	1 320			

ALLOWANCE FOR DOUBTFUL DEBTS

		\$	2028		\$
			30 Jun	Balance	1 000

- c The owner of Natural Nutrients decides to increase the allowance for doubtful debts to \$1500. Complete the Allowance for Doubtful Debts account, including the writing off of Nikov's account and the adjusting entry required to increase the allowance.

10 From trial balance to balance sheet

The following trial balance was supplied by the owner of Shot Callers Streetwear.

SHOT CALLERS STREETWEAR: TRIAL BALANCE AS AT 31 DECEMBER 2028

	\$		\$
Cash at bank	6 460	Capital	68 000
Interest	6 400	Sales	132 400
Inventory	51 000	Accounts payable	1 000
Term deposit (30/6/30)	26 000	Accumulated depreciation – furniture	800
Furniture	4 000	Accumulated depreciation – vehicle	6 000
Vehicle	32 000	Loan – DBC Finance	74 000
Prepaid insurance expense	3 400	GST clearing	1 000
Interest	6 400		
Cost of sales	65 800		
Drawings	6 400		
Rent	75 000		
Accounts receivable	6 000		
Telephone expense	740		
	283 200		283 200

Adjustments required:

- Inventory as per stocktake as at 31 December 2028: \$50 000.
 - Prepaid insurance as at 31 December 2028: \$100.
 - Telephone expenses owing: \$120.
 - Depreciation – vehicle: 25% per annum on cost.
 - Office furniture: 20% per annum, reducing balance method.
- a Prepare all adjusting and closing entries for the general journal on 31 December 2028.
 - b Prepare the following general ledger accounts, including any necessary adjusting and closing entries: Prepaid Insurance Expense, Telephone Expense, and Inventory.
 - c Prepare an adjusted trial balance as at 31 December 2028.
 - d Prepare an income statement for the year ended 31 December 2028 and a classified balance sheet at that date.
 - e The business paid \$300, plus GST of \$30, for telephone expenses on 15 January 2029, which included the \$120 owing from December 2028. Prepare the required entry in the general journal on 15 January 2029.





11 Reports with adjustments, including doubtful debts

The following trial balance relates to the business of Prints Charming, a small business owned and managed by Alanah Douglas.

PRINTS CHARMING: TRIAL BALANCE AS AT 30 SEPTEMBER 2028

	\$		\$
Cash at bank	5 200	Capital	112 000
Advertising	1 200	Cash sales	54 000
Accounts receivable	12 700	Credit sales	35 500
Cost of sales	49 600	Accumulated depreciation – equipment	6 600
Equipment	22 000	Accumulated depreciation – vehicle	12 000
Assistant's wages	23 000	Loan – MT Finance	38 000
Interest on loan	1 880	Accounts payable	10 000
Inventory	44 500	Commission revenue	200
Drawings	14 600	GST clearing	3 500
Telephone expense	1 680	Allowance for doubtful debts	1 500
Rent	44 600		
Stationery expense	1 590		
Vehicle	48 000		
Prepaid insurance expense	2 750		
	273 300		273 300

Adjustments required:

- One of the credit clients of the business has been declared bankrupt. The total amount of \$1760 owing by D Crepit is to be written off.
- After writing off D Crepit's account, the owner of Prints Charming has decided to increase the allowance for doubtful debts to \$2000.
- Insurance paid in advance as at 30 September 2028: \$150.
- Interest owing on loan: \$120.
- The owner gave some colour prints to the local kindergarten for a fundraising auction and received some advertising during the event. The goods provided had a cost price of \$500 and a selling price of \$950. As yet, no entry had been made to record this event.
- Depreciation of equipment: 15% per annum on cost.
- Depreciation of vehicles: 25% per annum, reducing balance method.
- Physical stocktake as at 30 September: \$42 900.
- On 30 September 2028, the owner realised that a payment of \$200 for wages was accidentally debited to advertising.

- Prepare an income statement, taking into account all the adjustments required.
- Prepare a classified balance sheet as at 30 September 2028.
- State the double entry that results when the interest owing is paid on 3 October 2028.

12 Reports with adjustments, including doubtful debts

The proprietor of One Stop Camping supplies the following information relating to her business.

ONE STOP CAMPING: TRIAL BALANCE AS AT 30 JUNE 2028

	\$		\$
Accounts receivable	23 850	Accumulated depreciation – office equipment	580
Advertising	3 200	Accumulated depreciation – shop fittings	1 760
Cleaning expenses	4 060	Allowance for doubtful debts	2 800
Cost of sales	75 800	Bank	14 370
Drawings	10 900	Capital	304 600
Interest expense	31 300	GST clearing	6 000
Inventory	48 520	Interest revenue	1 560
Investment account	15 700	Mortgage loan	670 000
Office equipment	5 800	Credit sales	121 780
Office expenses	3 140		
Premises	852 000		
Prepaid insurance expense	3 800		
Rates	2 600		
Salaries	31 240		
Sales returns	1 280		
Shop fittings	8 800		
Stationery expense	580		
Telephone expense	880		
	1 123 450		1 123 450

Adjustments required:

- Depreciation – office equipment: 20% per annum, reducing balance method.
 - Depreciation – shop fittings: 20% per annum on cost.
 - Insurance expired during period: \$3200.
 - An account for \$800 for cleaning done during June 2028 hasn't yet been paid and isn't included in the above accounts.
 - It's been discovered that \$200 of advertising has been incorrectly debited to the Interest Expense account.
 - The physical stocktake conducted on 30 June 2028 showed total inventory on hand of \$49 200.
 - The debt of a credit customer who owes \$3960 has to be written off as irrecoverable.
 - The allowance for doubtful debts is to be increased to 3% of net credit sales.
- a** Prepare an income statement for the year ended 30 June 2028, showing clearly the gross and net profit earned by the business.
- b** Prepare a classified balance sheet as at 30 June 2028.



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CASE STUDY

Nigella Cook is the owner of Maestro Kitchen Products. The trial balance of her general ledger accounts at the end of a year's trading is shown.

MAESTRO KITCHEN PRODUCTS: TRIAL BALANCE AS AT 30 JUNE 2028

	\$		\$
Accounts receivable	4 420	Accounts payable	12 500
Advertising	2 280	Accumulated depreciation – display equipment	1 460
Bank	2 130	Accumulated depreciation – office furniture	480
Carriage inwards	2 010	Capital	193 560
Carriage outwards	2 620	GST clearing	3 500
Carry bags expense	1 920	Allowance for doubtful debts	1 600
Cost of sales	62 620	Bank loan	223 000
Discount expense	1 020	Discount revenue	1 200
Equipment	14 600	Cash sales	86 100
Drawings	17 000	Credit sales	32 100
Electricity	1 420		
Interest expense	18 000		
Inventory	52 800		
Office expenses	1 500		
Office furniture	1 600		
Postage	1 030		
Premises	340 000		
Prepaid insurance expense	3 600		
Telephone expense	1 430		
Wages	23 500		
	555 500		555 500

- The insurance premium was for 12 months' coverage and was taken out on 1 August 2027.
- An account for \$120 for electricity for the month of June has been received but not yet paid. It will be paid on 4 July 2028.
- A physical stocktake performed on 30 June 2028 was checked against the firm's inventory cards. Discrepancies were found to exist on three different inventory cards and these were recorded on Memo 766.

Item	Inventory card balance: FIFO	Stocktake
Digital scales	11 @ \$28 25 @ \$29	30 on hand (selling price \$59.95)
Electric frypans	6 @ \$68 10 @ \$72	14 on hand (selling price \$139.50)
Three-litre saucepans	30 @ \$24	31 on hand (selling price \$45.00)

- It was discovered that the owner had withdrawn \$640 from the business on 26 June. No entry has been made to account for this transaction.
- A review of the EFT transactions reveals that \$40 paid for postage on 2 June 2028 has been incorrectly recorded in the firm's journal as a Telephone Expense account.
- The bank loan is repayable at the rate of \$400 per week.
- Depreciation is required as follows: display equipment 20% on cost; office furniture 15% on cost.
- One of the firm's accounts receivable, Con Spiracee, is to be written off as a bad debt. He owed \$1100.
- The allowance for doubtful debts is to be decreased to \$1200.



- » **a** Prepare general journal entries for all adjustments required on 30 June 2028.
- b** Prepare closing entries in the general journal on 30 June 2028.
- c** Complete the following general ledger accounts, including all relevant entries to account for the stated information: Prepaid Insurance Expense, Insurance Expense, Accrued Electricity, Electricity Expense, and Inventory.
- d** Complete the Profit and Loss Summary account as it would appear in the general ledger.
- e** Prepare the first section of the income statement to determine the gross profit and the adjusted gross profit of the business for the year. (The full report isn't required.)
- f** Prepare a balance sheet as at 30 June 2028.
- g** Explain your treatment of the insurance premium, with reference to one qualitative characteristic of accounting.
- h** Refer to the item regarding the withdrawal of cash by the owner. Justify your treatment of this item, with reference to one accounting assumption.
- i** Taking into account the information regarding the physical stocktake, comment on the management of the inventory held by the business.
- j** Comment on the level of profit earned by the business over the last 12 months.

EXAM-STYLE QUESTIONS

Question 1 (11 marks)

The following information was provided by a small business owner on 31 March 2028:

- The balance of the Inventory account was \$97 800, but the physical stocktake revealed inventory on hand costing \$98 700.
 - Delivery expenses paid during the period amounted to \$1950. Delivery expenses incurred during March but not yet paid were \$250.
 - Insurance paid on 1 October 2027 was \$3600 for 12 months' cover.
 - Accounts receivable of \$4800 included a customer who owes \$2970 and is to be written off as a bad debt.
- a** Prepare adjusting entries in the general journal for the four items listed above. Narrations are not required. (8 marks)
- b** Explain why balance day adjustments are necessary at the end of a period. Refer to an accounting assumption as part of your response. (3 marks)

Question 2 (5 marks)

Somerville Sports was established on 1 April 2028. On that day, the owner made a payment of \$52 800, including GST, for 12 months' rent in advance. The owner has decided that the reporting period for the business will conclude on 30 June each year.

Complete the following general ledger accounts, including all relevant entries from 1 April 2028 to 30 June 2028:

- Prepaid Rent Expense
- Rent Expense.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 19

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Balance day adjustments: Part 2

KEY TERMS

Liability approach
Unearned revenue
Accrued revenue

In this chapter, you will learn how unearned revenue and accrued revenue affect how we determine profit, and how to adjust the general ledger and general journal to account for such revenue items.

Learning objectives

By the end of this chapter, you will be able to:

- **outline** the meaning of the terms 'unearned revenue' and 'accrued revenue' [19.1]
- **prepare** balance day adjustments in the general journal for both unearned revenue and accrued revenue [19.1]
- **prepare** entries in the general ledger for unearned revenue using the liability approach [19.1]
- **describe** the twofold effect that adjustments for unearned revenue and accrued revenue have on the balance sheet [19.2, 19.3]
- **explain** the effect that balance day adjustments for unearned revenue and accrued revenue have on the income statement [19.2, 19.3]
- **describe** the treatment of accrued revenue in a subsequent period when the revenue is actually received [19.3]
- **prepare** accounting reports, taking into account balance day adjustments for unearned revenue and accrued revenue [19.3]

PRIOR KNOWLEDGE

CHAPTER 1: Accounting essentials

CHAPTER 11: Income statements

CHAPTER 18: Balance day adjustments: Part 1



Estimated time required: 2 weeks



19.1 Unearned revenue



What is ‘revenue earned for a period’?

Chapter 18 introduced the concept of balance day adjustments for expenses. Adjustments were made for expenses paid in advance (prepaid expenses), expenses not yet paid (accrued expenses), depreciation of non-current assets, and inventory losses or gains. The adjustments were made so that the account balances were equal to the amounts *incurred* during a period, rather than simply reflecting the amounts *paid* during that period.

The same scenario exists regarding a business’s revenue. When a firm prepares a trial balance, the accounts usually reflect the cash transactions that took place during the reporting period. Some small businesses only sell for cash, so their situation is straightforward: they provide goods and then receive cash in return. The balance of their Cash Sales account will likely equal the revenue they earned for the period.

However, this isn’t always the case. Take the example of an airline. Passengers make bookings well in advance for trips they plan to take in the future. They pay cash up-front, which the airline accepts for a future booking – so cash is paid in advance on the promise of something in the future. At any point in time, this type of business may hold large amounts of cash that it hasn’t yet earned. Should this cash be treated as revenue?

The principle of accrual accounting says ‘no’, as the business hasn’t yet fulfilled its obligation to provide the goods or services customers have paid for. In other words, the business hasn’t yet earned its revenue.

A second scenario occurs when a business has earned revenue but hasn’t received it yet. If a business has cash invested in a term deposit, but doesn’t receive interest until the maturity date, no interest revenue will be received during the period. Should they ignore this revenue simply because it hasn’t been received?

Accrual accounting requires *all* revenue earned to be reported in the income statement. But revenue that hasn’t yet been received won’t show up in a trial balance when the accounts are checked at the end of the period. This situation also needs to be taken into account when determining a business’s profit.

It’s possible that, in a given period, some revenue will be received in advance and some may not be received at all. It may be necessary to make adjustments on balance day in order to determine the revenue earned for that period. This follows the qualitative characteristic of *relevance*, as revenue earned is relevant to decision-making for the current period.



Businesses such as airlines are paid in advance before providing goods or services.

liability approach a method of accounting where the initial receipt of revenue is treated as a liability, with a subsequent transfer of the amount earned to a revenue account

The liability approach

A business may receive revenue before it has performed services or supplied goods to its customers. That is, the revenue it receives during one reporting period may include amounts that have been paid in advance for a subsequent period.

The **liability approach** to unearned revenue says that revenue received that relates to a future period shouldn't be included in the current period's profit calculation. This inflow of resources may appear to meet the definition of revenue; however, if it has been received in advance, it fits the definition of a *liability* because the firm has actually created an obligation of future economic sacrifice.

The liability may be in the form of goods or services to be provided in the future. However, if the business is unable to fulfil its obligations, it may take the form of a cash refund.

This problem is similar to the question of whether prepaid insurance is an asset or an expense. As you saw in Chapter 18, it's all a matter of timing. An asset becomes an expense when it is used up or consumed. Insurance paid in advance is treated as an asset (Prepaid Insurance) because it has future economic value. As it is used up, the asset Prepaid Insurance is eliminated and the amount is transferred to the Insurance Expense account, because it's now viewed as a sacrifice of resources during the period.

In the case of revenue received in advance, a future commitment is created and therefore a liability exists. As this commitment is fulfilled, the liability is eliminated and the revenue can then be recognised as being earned.

unearned revenue revenue that has been received in advance but not yet earned

Reporting of unearned revenue

Unearned revenue is simply revenue received but not yet earned. Unearned revenue may be unusual for many small businesses, but some do receive money in advance, before they have provided goods or services.

Consider the case of East Coast Coaches, a bus company that offers prepaid interstate fares. As the prepaid fares represent a liability to the business, it credits them to a liability account when it receives the cash. This account should have a descriptive title, such as 'Unearned Fares Revenue', to indicate the nature of what it has received.

The focus then switches to the adjustment required on balance day. Accrual accounting requires that revenue earned is matched with expenses incurred, but the bus fares were credited to a liability account when they were received. The next step is to transfer out of the liability account the amount of revenue the business has earned during the current period.

Payments received in advance, such as prepaid fares, should be credited to a liability account.



East Coast Coaches has the following financial records at the end of 2028.

Total bus fares received during 2028	\$90 000
Bus fares paid in advance for trips in 2029	\$10 000

Revenue received in advance for the next period should NOT be treated as revenue earned.

Using these details, the situation on balance day is as follows.

Total bus fares received	\$90 000
Bus fares revenue earned in 2028	\$80 000
Unearned fares that relate to 2029	\$10 000

Only \$80 000 of the \$90 000 is recognised as revenue for 2028. The other \$10 000 remains as a liability, because it represents a future commitment or obligation of the business.

The following Unearned Fares Revenue account has entries for both the original cash receipts and the necessary adjusting entry on 31 December 2028.

UNEARNED FARES REVENUE

2028		\$	2028		\$
1 Dec	Bus fares revenue	80 000	Jan-Dec	Cash at bank	90 000

BUS FARES REVENUE

			2028		\$
			1 Dec	Unearned fares revenue	80 000

On balance day, the revenue earned can be transferred from the liability account to the revenue account.

The adjusting entry transfers the amount of revenue earned from the liability account (Unearned Fares Revenue) to the revenue account (Bus Fares Revenue). The revenue account now has the revenue earned for the period, ready to be closed off to the Profit and Loss Summary account. The liability account can then be balanced, ready to be reported in the firm's balance sheet.

The closing of the revenue account and the balancing of the Unearned Fares Revenue account are shown.

UNEARNED FARES REVENUE

		\$			\$
2028			2028		
31 Dec	Bus fares revenue	80 000	Jan-Dec	Cash at bank	90 000
	Balance	10 000			
		90 000			90 000
			2029		
			1 Jan	Balance	10 000

This is the amount not yet earned. It should remain in the liability account until it is earned.

BUS FARES REVENUE

		\$			\$
2028			2028		
31 Dec	P&L summary	80 000	31 Dec	Unearned fares revenue	80 000

This is the amount of revenue earned for the period.

As usual, all general ledger entries must be journalised before being posted to ledger accounts. Figure 19.1 shows the adjusting and closing entries for the example of unearned revenue.

Figure 19.1 General journal adjusting and closing entries for unearned revenue

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec 2028	Unearned fares revenue	80 000	
	Bus fares revenue		80 000
	Adjusting entry for bus fares earned during the period		
31 Dec 2028	Bus fares revenue	80 000	
	P&L summary		80 000
	Closing entry		

This treatment of unearned revenue responds to the demands of *relevance*. Under accrual accounting, the fares received in advance for 2029 (\$10 000) aren't relevant to the period that concludes on 31 December 2028. They should therefore be excluded from the income statement for that period. Such fares will remain in the liability account until the firm has fulfilled its obligations.

When the prepaid customers take their trip, the revenue is transferred from the liability account to the revenue account. This means that the revenue will be recognised in the same period as when the *expenses* of the bus trips are incurred, which satisfies the demands of accrual accounting.

This practice of not recognising revenue until it is earned, as well as matching revenue against the relevant expenses, allows for profit for a period to be measured accurately. It thus meets the requirements of the *period assumption*.

Unearned revenue and GST

The previous example showed how unearned revenue should be treated on balance day. However, keep in mind that when a business receives revenue (including unearned revenue), it may also receive an amount of GST.

In the example, the unearned bus fares received were \$90 000. When we apply the 10% GST to this amount, we see that the business would have actually received \$99 000 – that is, \$90 000 for the actual bus fares, plus GST of \$9 000.

The GST should be recorded in the general journal at the time the cash is received (see Figure 19.2).

Figure 19.2 General journal entry to record the receipt of unearned revenue, including GST

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec 2028	Cash at bank	99 000	
	Unearned fares revenue		90 000
	GST clearing		9 000
	Bus fares revenue received in advance		

19.2 Unearned sales revenue



Most trading businesses don't receive a great deal of their revenue in advance, as customers usually prefer to receive goods when they pay for them. However, in some industries a customer may pay a deposit to secure an order. If a business receives a deposit from a customer before supplying the goods to them, it represents a liability to the business at that time. It may issue a receipt on receiving the deposit and then a sales invoice when it delivers the goods. These source documents are important, as they help to determine how such financial events will be recorded.

For instance, Cara Johnston owns Peninsula Furniture, a small business that makes a range of furniture to customers' specifications. The following events take place.

Jun 1	Hillside Motel placed an order for 20 coffee tables at a price of \$200 each, plus \$20 GST. Total of the order: \$4000, plus \$400 GST. Johnston required a deposit of 20% of the selling price to secure the order and wrote Receipt 43 for \$800 (20% of \$4000 = \$800).										
30	Johnston delivered the 20 coffee tables to Hillside Motel, along with Invoice 160 for the amount owing, as shown below. (The cost of the sale was \$1800.)										
<table border="1"> <tr> <td>20 coffee tables @ \$200 each</td><td>\$4 000</td></tr> <tr> <td>Plus 10% GST</td><td>\$ 400</td></tr> <tr> <td>Total of order</td><td>\$4 400</td></tr> <tr> <td>Less deposit</td><td>\$ 800</td></tr> <tr> <td>Total now due</td><td>\$3 600</td></tr> </table>		20 coffee tables @ \$200 each	\$4 000	Plus 10% GST	\$ 400	Total of order	\$4 400	Less deposit	\$ 800	Total now due	\$3 600
20 coffee tables @ \$200 each	\$4 000										
Plus 10% GST	\$ 400										
Total of order	\$4 400										
Less deposit	\$ 800										
Total now due	\$3 600										
Jul 15	Hillside Motel made a payment of \$3600 via EFT (Receipt 56).										

The first step in documenting this series of events is to record the receipt of the deposit, as shown in Figure 19.3.

Figure 19.3 General journal entry to record a deposit on unearned sales

GENERAL JOURNAL			
Date	Details	Dr	Cr
1 Jun 2028	Cash at bank	800	
	Unearned sales revenue		800

Note that there is no GST recorded in this entry. The \$800 received from Hillside Motel is simply to secure the order. At this point, no goods have been provided and no revenue has been earned.

The entry in the general journal creates the liability account Unearned Sales Revenue. As Peninsula Furniture has received \$800 in advance from the customer, it now has an obligation to provide it with the goods. If it can't fulfil the order, it may have to pay a cash refund to the customer.



A deposit paid before delivery is considered unearned sales revenue.

On 30 June the goods are delivered to Hillside Motel, along with a sales invoice. This creates the need for another journal entry. Assuming that this date is also the end of the reporting period, a balance day adjustment is required to transfer the unearned sales revenue (the deposit) to the Sales Revenue account. Figure 19.4 shows the adjusting entry required on 30 June.

Figure 19.4 General journal entry to adjust for unearned revenue now earned

GENERAL JOURNAL			
Date	Details	Dr	Cr
30 Jun 2028	Unearned sales revenue	800	
	Sales revenue		800
	Adjusting entry for sales revenue earned this period		

As the coffee tables have now been provided to the customer, Peninsula Furniture no longer has a liability to Hillside Motel and the \$800 can be recognised as revenue earned for the period.

However, this entry doesn't complete the full series of events, as the customer was also issued with an invoice on 30 June. This document specified the full charge to the customer (\$4000, plus GST of \$400), the deposit already paid (\$800) and the amount that remains outstanding (\$4400 – \$800 = \$3600).

Figure 19.5 shows the final entry to complete the sale made to Hillside Motel.

Figure 19.5 General journal entry to record a credit sale

GENERAL JOURNAL			
Date	Details	Dr	Cr
30 Jun 2028	Accounts receivable	3 600	
	Sales revenue		3 200
	GST clearing		400
	Cost of sales	1 800	
	Inventory		1 800
	Credit sale made to Hillside Motel, after deducting deposit of \$800 (Invoice 160)		



This may look like a standard entry for a credit sale, but there is one important difference. Usually in such an entry, the GST amount is a dollar value equal to 10% of the Sales Revenue entry. This isn't the case here, because Peninsula Furniture already received \$800 of sales revenue in the form of the deposit made on 1 June. As shown in the previous calculation, the customer owes a total of \$3600 to Peninsula Furniture and the entry reflects this amount.

Having recorded the credit sale and the balance day adjustment for the unearned revenue (the deposit), the final transaction to be recorded is the cash receipt on 15 July. As Hillside Motel became an accounts receivable of Peninsula Furniture on 30 June (when the invoice was issued), the final payment of \$3600 is recorded in the usual way, as shown in Figure 19.6.

Figure 19.6 General journal entry to record the receipt of cash from an accounts receivable

GENERAL JOURNAL			
Date	Details	Dr	Cr
15 Jul 2028	Cash at bank	3 600	
	Accounts receivable		3 600

19.3 Accrued revenue (revenue owing)



Another situation that may exist on balance day is when a business earned revenue during the reporting period but hasn't yet received it. If the revenue-earning process has ended, the principles of accrual accounting require the revenue to be recognised as earned.

Consider the case of Geelong Gift Shop, a business that invested \$20 000 for six months on 1 July 2028 at 10% per annum. It expects to receive the interest on 2 January 2029. If the gift shop has its balance day on 31 December 2028, the trial balance won't show a balance in the Interest Revenue account because interest won't be received during 2028.

However, Geelong Gift Shop has earned \$1000 of interest in the 2028 reporting period (10% of \$20 000 = \$2000 interest per annum, or \$1000 interest for six months). The double entry for the balance day adjustment would be as follows.

INTEREST REVENUE					
		\$	2028		\$
			31 Dec	Accrued interest revenue	1 000

ACCRUED INTEREST REVENUE					
2028		\$			\$
31 Dec	Interest revenue	1 000			

This adjusting entry has two functions:

- It increases the revenue account so that the revenue equals the amount earned for the period.
- It creates a temporary asset account for the purposes of reporting in the balance sheet.

accrued revenue revenue that has been earned but not yet received

Accrued revenue represents revenue that has been earned but hasn't yet been received. Therefore, it's a future economic benefit to Geelong Gift Shop and should be reported as a current asset in the balance sheet. The Interest Revenue account would then be closed off to the Profit and Loss Summary account.

INTEREST REVENUE					
2028		\$	2028		\$
31 Dec	P&L summary	1 000	31 Dec	Accrued interest revenue	1 000

After the balance day adjustment has been entered in the Interest Revenue account, the balance of the account represents the interest revenue earned for the period. This is closed off to the Profit and Loss Summary account as part of the process of determining profit. This completes the process for the current reporting period.

The adjusting and closing entries are shown in the general journal in Figure 19.7.

Figure 19.7 General journal adjusting and closing entries for accrued revenue

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Dec 2028	Accrued interest revenue	1 000	
	Interest revenue		1 000
	Adjusting entry for six months' interest earned but not received		
31 Dec 2028	Interest revenue	1 000	
	P&L summary		1 000
	Closing entry		

Accrued revenue in subsequent periods

Geelong Gift Shop created an Accrued Interest Revenue account for the interest it earned during 2028. The \$1000 listed at that time would be reported in the balance sheet as a current asset. This revenue is actually received in the next period (i.e. 2 January 2029) when the term deposit matures.

When the \$1000 interest revenue owing is received, it isn't recorded as revenue for 2029 as it all belongs to the 2028 reporting period. Figure 19.8 shows how to record the receipt of the interest on 2 January 2029.

Figure 19.8 General journal entry to record the receipt of accrued revenue

GENERAL JOURNAL			
Date	Details	Dr	Cr
2 Jan 2029	Cash at bank	1 000	
	Accrued interest revenue		1 000
	Receipt of interest for six months, reported as accrued interest revenue in the previous period		

This entry is made to close off the Accrued Interest Revenue account created on balance day of the 2028 period. When accrued revenue is received in the subsequent reporting period, the accrued account is eliminated.

When the above entry is posted to the general ledger, the Accrued Interest Revenue account appears as follows.

ACCRUED INTEREST REVENUE					
2028		\$	2029		\$
31 Dec	Interest revenue	1 000	2 Jan	Cash at bank	1 000

EXAM-STYLE QUESTION

The owner of Aspendale Artworks decided to invest some cash in a term deposit for 12 months. The owner's bank offered 6% interest if they invested a minimum of \$10 000. The owner agreed and transferred \$10 000 to a term deposit account on 1 May 2028. The reporting period for this business ends on 31 August each year.

Prepare the general journal entry to adjust for the interest revenue earned as at 31 August 2028. (3 marks)

Sample answer

GENERAL JOURNAL			
Date	Details	Dr	Cr
31 Aug 2028	Accrued interest revenue	200	
	Interest revenue		200
	Adjusting entry for four months' interest earned		

Exam advice

Previously, you were advised always to *debit the expense* account when preparing balance day adjustments in relation to expenses. A similar rule is: always *credit the revenue* account when doing a balance day adjustment for a revenue item. This is the case for both unearned revenue and accrued revenue. As was the case with accrued interest expense, always check the number of months that interest has been earned before calculating the dollar value for the adjusting entry.

Don't rush your answer when preparing general journal entries. Calculate the interest for a year and then check the details again. The investment may have been taken out for 12 months, but ask yourself the question: Over how many months was interest earned? Many students rush this type of question and then accidentally include one year's interest as being earned. Don't fall into this trap!

Receipt of accrued revenue in the next period

Sometimes, when accrued revenue is received in a subsequent reporting period, it may be part of a larger cash receipt. This payment may include revenue that relates to the new period, in addition to the amount owing from the previous period.

In the Geelong Gift Shop example, interest of \$1000 was owing from the previous period. This amount was then received in the subsequent reporting period. However, you should also be prepared to record the receipt of revenue in excess of this amount. The following example demonstrates this situation.

Commission earned during June 2028 but not received	\$500
Commission received on 31 July 2028 (including the \$500 owing)	\$600 (plus \$60 GST)

The \$600 received on 31 July can be broken into two parts: \$500 is the amount owing from the previous period; and \$100 relates to commission earned during the new period.

In this case, it's important to record the two amounts separately:

- The \$500 owing is closed off in the asset account Accrued Commission Revenue.
- The \$100 is recorded in the Commission Revenue account for the new period.

The GST received is recorded in the usual way.

The entries would therefore be as follows.

ACCRUED COMMISSION REVENUE

		\$			\$
30 Jun	Commission revenue	500	31 Jul	Cash at bank	500

This entry cancels out the amount of interest owing on balance day.

COMMISSION REVENUE

		\$			\$
			31 Jul	Cash at bank	100

This entry records the revenue being earned in the new reporting period.

GST CLEARING

		\$			\$
			31 Jul	Cash at bank	60

CASH AT BANK

		\$			\$
31 Jul	Accrued commission revenue	500			
	Commission revenue	100			
	GST clearing	60			

The entries in the Cash at Bank account show clearly how the \$660 is made up of three different inflows. Always keep them separate.

The Accrued Interest Revenue account that was created on balance day must be closed off when the cash is received. The remainder of the cash received by the business is then recorded in the relevant revenue account for the new period, with the GST (if applicable) recorded in the usual fashion.

The journal entry for this example is shown in Figure 19.9.

Figure 19.9 General journal entry to record the receipt of accrued interest revenue

GENERAL JOURNAL

Date	Details	Dr	Cr
31 Jul 2028	Cash at bank	660	
	Accrued interest revenue		500
	Commission revenue		100
	GST clearing		60



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [19.1]** In a given reporting period, some revenue may be received in advance; this is called unearned revenue. Other revenue may not be received until the next reporting period; this is called accrued revenue. Balance day adjustments are needed to account for such revenue.
- [19.1]** The liability approach to unearned revenue holds that any revenue received that relates to a future period should not be included in the current period's profit calculation. Instead, it should be recorded as a liability.
- [19.2]** Deposits are the most common form of unearned revenue for a trading business. These should also be recorded as liabilities. If the customer doesn't receive their item, the business must return the deposit.
- [19.3]** Accrued revenue that hasn't yet been received is a future economic benefit for a business. It should therefore be reported as a current asset in the balance sheet.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Unearned revenue: Amount unearned provided

Marble Memorials sells custom-made headstones to cemeteries on a prepaid basis. In the quarter ended 31 March 2028, the business received \$42 000 in advance payments for headstones. Of this amount, \$4000 relates to headstones to be delivered in April. The business uses the liability approach to record revenues received in advance.

- State the amount of revenue that would be reported for the quarter ended 31 March 2028 under accrual accounting.
- Prepare the general journal entries required to record the adjusting and closing entries relating to the sales revenue for the quarter.
- Prepare all the relevant entries for the quarter ended 31 March 2028 that would be made to the Unearned Sales Revenue and Sales Revenue accounts.
- State and explain the effect on the firm's reports if the balance day adjustment wasn't recorded.



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2 Unearned revenue: Amount unearned provided

The following account appeared in the general ledger of City Real Estate.

UNEARNED RENTAL REVENUE

		\$			\$
			1 Jul 27	Balance	5 000
			30 Jun 28	Cash at bank	90 000

On 30 June 2028, the manager determined that the unearned revenue totalled \$8000.

- Explain what the \$5000 balance shown in the above account on 1 July 2027 represents.
- Prepare the adjusting and closing entries in the general journal on 30 June 2028.
- Prepare the Unearned Rental Revenue account and post all general journal entries prepared in part **a**.



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3 Unearned revenue: Amount earned provided

Custom Canopies sells custom-made modifications for utility vehicles. Because of the nature of the business, it requires customers to prepay all orders. During the year ended 30 September 2028, the business received a total of \$234 000 from its customers. The manager determined that \$222 000 of this amount had been earned by the end of the period.

- Prepare the relevant adjusting and closing general journal entries on 30 September 2028.
- Prepare the two accounts affected by your adjusting entry in part **a**, showing all relevant entries.
- Is the balance sheet affected by your adjusting entry in part **a**? If so, state the twofold effect of the adjusting entry.
- State the effect of your adjusting entry in part **a** on the firm's income statement.

4 Unearned revenue: Amount earned provided

Dani Dothraki owns Cosmeti-Crate, a business that sends out monthly curated packages of makeup and beauty materials. Subscribers must pay \$120 per year, plus GST of \$12, for 12 packages. During the year ended 30 June 2028, Dothraki received a total of \$52 800, consisting of subscriptions of \$48 000, plus GST. On balance day, she establishes that \$36 000 of the revenue received has been earned.

- a Prepare the entry in the general journal to show how the \$52 800 would have been recorded when the cash was received.
- b Complete the necessary adjusting and closing entries in the general journal on 30 June 2028.
- c Prepare the Unearned Subscriptions Revenue and Subscriptions Revenue accounts, showing all entries for the period ending 30 June 2028.
- d How should the amount not yet earned be reported on 30 June 2028? Explain your answer fully, with reference to the relevant definitions of balance sheet terms.

5 Unearned revenue: Deposit received

Beds 'R' Us received an order for 10 single beds at a price of \$450 each, plus GST, from Dromana Holiday Resort on 11 November 2028. The customer paid a deposit of \$500 on this date to confirm the order. Receipt no. 53 was issued to the customer. No GST was received at the time the order was confirmed. The cost price of each bed was \$250.

On 28 December 2028, Beds 'R' Us delivers the 10 beds to Dromana Holiday Resort and issued Invoice 726 for \$4500, plus GST of \$450, less the deposit already received in November. The reporting period for this business ends on 31 December each year.

- a Prepare the journal entry required on 11 November 2028 to record the deposit received from Dromana Holiday Resort.
- b Record the relevant entry in the journal on 28 December 2028 when the delivery was made to the customer.
- c Prepare the required balance day adjustment in the general journal on 31 December 2028 in relation to the unearned revenue received by Beds 'R' Us.

6 Unearned revenue: Deposit received

Phil Mitchell is the owner of Mitchell Education, a small business that provides a range of educational teaching aids. The reporting period for Mitchell's business runs from 1 July to 30 June each year.

On 14 April 2028, Moonga College ordered 20 whiteboards from Mitchell Education, paying a deposit of \$2000. The selling price of the whiteboards was \$800 each (plus GST), while the cost price was \$370 each (plus GST).

On 24 June 2028, Mitchell Education delivered the 20 whiteboards to Moonga College and issued Invoice 1763.

- a Prepare the journal entry required to record the deposit received from Moonga College.
- b Prepare the adjusting entry required on 30 June to transfer unearned revenue to the Sales Revenue account.
- c Record the relevant entry in the general journal on 24 June when Invoice 1763 was issued.



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Unearned revenue: Deposit received, order partially completed

The owner of Pearson Electronics, Belinda Pearson, asks you to help her record some recent transactions with one of her customers.

On 12 August 2028, Pearson accepted an order to provide 10 data projectors to Kolbe University at a price of \$3200 per projector, plus \$320 GST. Pearson agreed to provide the goods but required a payment of 10% of the selling price to secure the order. She received this deposit from Kolbe University on 14 August 2028 and sent Receipt 97 to the customer. The reporting period for Pearson Electronics ends on 30 September each year. The business applies a mark-up of 100% to all goods sold.

The data projectors required by Kolbe University are in short supply, but Pearson managed to obtain and deliver six units to Kolbe on 30 September, along with the following document.

 Pearson Electronics 9189 Bell Street Coburg VIC 3058		ABN	31 789 756 433
		Date	30/9/2028
		TAX INVOICE	No. 746
Charge	Kolbe University		
For	6 deluxe data projectors @ \$3200 per unit		\$19200
	Plus: GST		\$1920
	Subtotal		\$21 120
	Less: Deposit received		\$3200
	Amount now due		\$17920

Pearson delivered the other four data projectors to Kolbe on 21 October 2028 and issued Invoice 756 on that date.

- Prepare the general journal entry required to record the deposit received from Kolbe University.
- Prepare the general journal adjusting entry required on 30 September in relation to unearned sales revenue.
- Record in the general journal the credit sale made on 30 September 2028.
- Record the credit sale evidenced by Invoice 756 on 21 October 2028.



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Accrued revenue

On 1 April 2028, Brooklyn Bicycles invested \$8000 in 6% state government bonds for three years. The business will receive interest on 31 March each year. Balance day is 31 December. The owner of the business asks for your help in calculating interest revenue earned for 2028.

- Prepare the adjusting entry required in the general journal on 31 December 2028 and the closing entry that would follow.
- Post the general journal entries from part **a** to the Interest Revenue and Accrued Interest Revenue accounts.
- State the twofold effect of the adjusting entry in part **a** on the balance sheet of the business.
- Prepare the general journal entry on 31 March 2029 when the business received the annual interest from the bank.

9 Accrued revenue

Bev Roberts invested excess cash from her business in a term deposit paying 5% per annum. She invested \$10 000 on 1 July 2028 for two years. Her balance day each year is 31 December, and interest is paid on 30 June.

- a** How much interest has Roberts earned in the year ending 31 December 2028?
- b** How much interest has she received in the year ended 31 December 2028?
- c** Explain how to treat these events in the income statement and balance sheet at the end of 2028.

10 Accrued revenue: Effect on reports

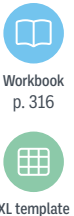
The owner of Emjay Salon, Maree Johnson, decided to take out a term deposit for four years, starting on 1 November 2027. The bank has agreed to pay her 4.5% for a minimum investment of \$40 000. Its policy is to pay interest on all term deposit accounts on 31 March, 30 June, 30 September and 31 December each year. Johnson agreed to these terms and invested \$30 000. Her reporting period ends on 30 June each year.

- a** Calculate how much interest would be received in the yearly period that ends on 30 June 2028.
- b** Does your answer to part **a** represent the interest earned for the period? Explain your answer fully.
- c** Using the above information, state the item, its classification and the dollar value that would be reported in the following accounting reports:
 - i** cash flow statement for the year ended 30 June 2028
 - ii** income statement for the year ended 30 June 2028
 - iii** balance sheet as at 30 June 2028.

11 Accrued revenue: Receipt in the subsequent period

During the year ended 31 December 2028 the owner of Geelong Art Supplies, Tony Paatsch, recorded receipts of commission revenue of \$21 000. However, when Paatsch checked the sales figures for December, he found that additional commission of \$4000 had been earned but not yet received.

- a** Prepare the adjusting entry required on 31 December 2028 and the closing entry on that date.
- b** Prepare the two ledger accounts affected by your adjusting entry from part **a**.
- c** Is the balance sheet affected by your adjusting entry in part **a**? If so, state the twofold effect of the adjusting entry on the balance sheet.
- d** On 17 January 2029, Paatsch received the commission owing, along with \$2000 commission for the new period and GST of \$600. State the double entry required when he received the commission owing.
- e** Explain the impact on the accounting reports prepared for the year ended 31 December 2029 if Paatsch credited the commission he received on 17 January to the Commission Revenue account.





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12 Accrued revenue: Receipt in the subsequent period

Adam Taylor, owner of Taylor's Beehives, invests \$16 000 in a four-year term deposit at 5.5% per annum. He made the investment on 1 November 2027 and the business closes its books on 30 June each year. Interest on the investment is paid twice a year, on 30 April and 31 October.

- Prepare the relevant general ledger accounts to show all the transactions relating to the investment from 1 November 2027 to 31 October 2028. Your entries should include all cash transactions, as well as adjusting and closing entries.
- Prepare the adjusting and closing entries that would be made in the general journal on 30 June 2028.
- State and explain the effect on the firm's reports if the balance day adjustment wasn't recorded on 30 June 2028.
- Show how to record the receipt of interest on 31 October 2028 in the general journal of Taylor's Beehives.



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CASE STUDY

John McConville is the proprietor of Carlton Trophies, a business that makes trophies and medallions for individuals, schools and businesses. Because of the nature of the work, the firm requires cash up-front from all customers. Unearned revenue is recorded using the liability approach.

The following trial balance provides information about the business and its records for the current year.

CARLTON TROPHIES: TRIAL BALANCE AS AT 31 AUGUST 2028

	\$		\$
Cost of sales	37 000	Unearned sales revenue	92 000
Cash at bank	12 000	Capital	321 800
Display equipment	11 000	Accounts payable	12 400
Cleaning of premises	4 200	Interest revenue	200
Stationery expense	1 740	Loan – TY Finance	13 750
Prepaid insurance	1 800	Mortgage loan	328 000
Term deposit	5 000	Accumulated depreciation – display equipment	7 000
Drawings	16 000	GST clearing	3 200
Inventory	40 150		
Advertising	500		
Wages	22 160		
Interest expense	16 800		
Premises	610 000		
	778 350		778 350

- Of the unearned sales revenue, \$8400 relates to orders that will be completed during September and October 2028.
- An account for advertising done during August 2028 hasn't yet been paid. The invoice from Northern Newspapers is for \$100.
- The insurance policy of \$1800 was taken out on 1 December 2027 for 12 months' cover.
- Interest on the term deposit is payable at 4% per annum. The investment was made on 30 April 2027 for a three-year period.
- The firm's receipts show that McConville withdrew \$2000 cash in June, but this was accidentally debited to wages.
- Commission revenue earned by the business during the period was \$500. None of this commission has yet been received.



- » • A bank statement received on 31 August 2028 showed that interest was charged on the mortgage loan for the last month of the period. The amount was \$1200, and this payment wasn't taken into account before the above trial balance was prepared.
- A stocktake done on 31 August revealed inventory on hand costing \$40 500.
 - Depreciation of display equipment is to be recorded at 10% per annum, using the reducing balance method.
- a Prepare all the required adjusting entries in the general journal on 31 August 2028.
 - b Prepare an income statement for the year ended 31 August 2028, showing both the gross profit and net profit for the period.
 - c Taking into account all the adjustments required, prepare extracts from the balance sheet to show the current assets and current liabilities as at 31 August 2028.
 - d Commission received on 5 September 2028 totalled \$700, plus GST of \$70. Prepare the Accrued Commission Revenue account, including the balance day adjustment and the subsequent receipt of cash in the new reporting period.
 - e Prepare the relevant entry in the firm's general journal when the commission was received on 5 September 2028.
 - f McConville says he'll settle the account for the outstanding advertising expense on 7 September 2028. Prepare the Accrued Advertising Expense account, including the balance day adjustment and the subsequent payment of cash.
 - g Prepare the following general ledger accounts, including all relevant entries: Unearned Sales Revenue, Prepaid Insurance Expense, Capital, and Drawings.

ETHICAL CONSIDERATIONS

Jenny Atkinson is the owner of Designer Diaries, a small firm that sells custom-designed personal or business diaries. Customers are expected to pay up-front when placing an order with the business.

During the year ended 30 June 2028, the business received a total of \$260 000 in orders. When Atkinson checks at the end of the current period how many orders haven't been filled, she's surprised to find that only \$5000 remains as unearned revenue. This means that the business has earned \$255 000 in revenue for the year and will show a significant profit for the period. While pleased about the profit, she's now worried about how much tax she will have to pay.

Atkinson's husband suggests that she can delay recognising some of the sales by shifting them to the next period, to show a smaller profit for the current period. After all, he says, the tax will be paid, whether this year or next, so it doesn't make much difference.

They agree that the adjusting entry for the current period would be as follows.

GENERAL JOURNAL

Date	Details	Dr	Cr
30 Jun 2028	Unearned sales revenue	200 000	
	Sales revenue		200 000
	Adjusting entry for sales revenue earned this period		

Atkinson asks for your professional opinion on this issue. Prepare a report for her, making reference to the following items:

- the potential financial benefit of the decision to the business (if any)
- the potential financial costs of the decision (if any)
- the period assumption
- the qualitative characteristic of *relevance*
- the meaning of accrual accounting
- any ethical considerations of the decision.



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EXAM-STYLE QUESTIONS

Question 1 (14 marks)

Lleyton Healy is the owner of Healy's Hardware. He has provided the following details, which were extracted from his general ledger on 31 July 2028.

Account name	Dr	Cr
Accounts receivable	5 600	
Advertising	9 400	
Cartage inwards	1 600	
Cost of sales	45 000	
Discount expense	1 500	
Discount revenue		1 400
Drawings	6 000	
Interest		1 600
Inventory	32 000	
Prepaid insurance	2 400	
Sales		92 000
Sales returns	2 000	

- The prepaid insurance was for a 12-month policy taken out on 31 March 2028.
 - An invoice for advertising completed during July 2028 hasn't yet been paid. The invoice was for \$440, including GST.
 - Interest revenue earned but not yet received was \$400.
 - A physical stocktake completed on 31 July found total inventory of \$30 600.
- a Prepare** the relevant adjusting entries in the general journal to record the additional information shown above. Narrations are not required. (8 marks)
- b Prepare** an income statement for the year ended 31 July 2028. (6 marks)

Question 2 (11 marks)

Doncaster Furniture is owned and operated by Samantha Sanderson. As she sells a lot of furniture on a custom-made basis, she expects customers to pay in advance a deposit of 20% of the selling price of the goods.

Sanderson applies a fixed mark-up of 100% on all products sold. On 14 July 2028, she received an email order from Bulleen College as follows:

- 100 classroom chairs at \$36 each, plus GST
- 25 tables at \$120 each, plus GST.

She also received an EFT of \$1320 from Bulleen College on 14 July.

The goods were subsequently delivered on 17 August and Invoice 635 was issued for the amount owing.

- a Prepare** the general journal entry required to record the deposit received on 14 July. (3 marks)
- b Prepare** all general journal entries required on 17 August to record the details of Invoice 635 and account for the deposit received. (6 marks)
- c Explain** how to report the deposit in the balance sheet of Doncaster Furniture on 31 July 2028. (2 marks)



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 20

15 16 17 18 19 20 21 22 23

Budgeting

KEY TERMS

Budgeting
Sales budget
Expense budget
Budgeted cash flow statement
Schedule of collections
Schedule of payments
Budgeted income statement
Budgeted balance sheet

In this chapter, you will learn why budgeting is so vital for a successful business, and how to create a variety of budgeted reports.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the need for budgeting in small businesses [20.1]
- **outline** the role played by a variety of budgets [20.1]
- **identify** relevant items used in the different types of budgets [20.1]
- **reconstruct** ledger accounts to find information relevant to budgeting [20.2]
- **prepare** budgeted cash flow statements [20.3]
- **prepare** budgeted income statements [20.4]
- **prepare** budgeted balance sheets [20.5]

PRIOR KNOWLEDGE

CHAPTER 2: Balance sheets

CHAPTER 11: Income statements

CHAPTER 14: Cash flow statements



Estimated time required: 2 weeks





20.1 The need for budgeting

budgeting the process of preparing a financial plan for a business

Budgeting is a means of planning and controlling a business's future financial transactions. The budgeting process involves making estimates of what is expected to happen in the future.

All businesses need to prepare a budget because all managers should have a basic financial plan. Those plans might include making sales of a particular value, increasing market share to a specific percentage, or generating a certain rate of return on investment.

A financial plan can be prepared and then modified as necessary to improve a business's performance. A business that doesn't have a financial plan will operate haphazardly, without effective control or oversight.

Some budgets set achievement targets, while others set expenditure limits. For example, a business can use its **sales budget** to estimate its future revenue. This provides a target for management and employees to aim for in a future reporting period. It might also provide incentives for staff to improve their performance; if every employee improved, the overall business would benefit in terms of sales and, probably, profits.

Other budgets simply aim to control a business's costs. Sometimes expenses are grouped together to identify cost centres within a business. An **expense budget** based on a cost centre helps in planning a business's future expenses and in limiting spending within particular segments of the business.

sales budget a report that includes estimates of all sales for a future reporting period

expense budget a list of predicted expense items for a future reporting period

Different types of budgets

Management may develop a very complex budget plan, or it may adopt the more commonly used budget tools. Table 20.1 lists some of the types of budgets that small business owners and/or managers might use.

Table 20.1 Types of budgets and their purposes

Master budget	Sets out the overall planning strategy of the business; made up of information from many of the other types of budgets.
Sales budget	Predicts the future sales revenue expected to be earned by the business. Usually includes quantities of products expected to be sold and their anticipated selling prices.
Purchases budget	Estimates the cost of purchases required to meet the anticipated sales of the business.
Labour budget	Predicts the staff required and the cost of wages and salaries for a given period.
Expense budget	Outlines the cost of all expenses necessary to meet the business's plans.
Budgeted cash flow statement	Predicts the future cash inflows and cash outflows of the business, with the final figure being the predicted cash balance at one point in time.
Budgeted income statement	Provides a summary of all revenues and expenses expected for a period, with the final figure being the predicted net profit or loss for the period.
Budgeted balance sheet	Estimates the future financial position of the business. Includes predictions of assets, liabilities and owner's equity at a particular time in the future.

Perhaps the most important budget for many small trading businesses is the sales budget, which involves estimating the future sales of the business. The sales budget is crucial to the overall budgeting process, as these forecasts are linked directly to many other types of budgets.

- The sales made by a business will hopefully lead to an inflow of cash in the future, so the sales forecast has a direct impact on the business's estimated cash flows.
- The sales not expected to be collected in a given period lead to an estimated Accounts Receivable balance, which becomes part of the budgeted balance sheet.
- As both cash and credit sales are usually recognised as revenue earned during a period, the sales forecast also has a direct link with the budgeted income statement.

The estimate of sales also leads to other predictions, such as inventory requirements, estimated purchases and staffing needs. The sales budget is therefore the cornerstone of the budgeting process.

Small business owners can also prepare other types of budgets. For example, a capital budget is used to plan the replacement of assets (also known as capital items) in the future. Assets such as equipment, shop fittings and computers involve a considerable capital outlay, but businesses rarely have cash available at short notice to replace them. Management must plan how such assets will be replaced when they reach the end of their useful working lives.

The capital budget also has an impact on several other budgets.

- As non-current assets are involved, the budgeted balance sheet is directly affected.
- If cash is paid for assets, the budgeted cash flow statement must reflect the cash outflow expected to occur for purchases.
- Once assets are purchased, their depreciation will be shown in a budgeted income statement.

Depending on the size of the business, other budgets may also be prepared.

Although it's important to have an overview of the complete budgeting process, this chapter focuses on three key types of budgets: budgeted cash flow statements, budgeted income statements and budgeted balance sheets.

20.2 Cash budgeting

A **budgeted cash flow statement** looks at a business's future cash inflows and outflows. It's particularly important for trading businesses because of their significant investment in the inventory they sell.

The success of a trading business is largely determined by management's ability to turn inventory into cash on a regular basis. As many businesses purchase inventory on credit over 30 or 60 days, it's crucial to know the expected cash situation of the business in the forthcoming months.



budgeted cash flow statement
an accounting report that shows estimates of cash receipts and payments, and bank balance, for a particular future period



The preparation of a budgeted cash flow statement must consider all future inflows and outflows of cash. Typical items that are reported in a budgeted cash flow statement for a trading business are shown in the following table, using the usual classifications of a cash flow statement.

ANTICIPATED CASH INFLOWS (RECEIPTS)		
Operating activities	Investing activities	Financing activities
• cash sales of inventory • collections from accounts receivable (from credit sales made previously) • other revenues (e.g. interest revenue, commissions) • GST collected from customers	• cash receipts from the disposal of non-current assets	• cash contributions by the proprietor (i.e. additional capital) • loans (e.g. from banks, finance companies)

ANTICIPATED CASH OUTFLOWS (PAYMENTS)		
Operating activities	Investing activities	Financing activities
• cash purchases of inventory • payments to accounts payable (from credit purchases made previously) • cash payments of expense items • GST paid to suppliers	• cash payments for non-current assets (buying new assets)	• cash withdrawals by the proprietor • repayments of loans

Making estimates

As with any form of budgeting, the most difficult task is making an estimate of a future event. Some cash flows are fairly constant, while others fluctuate wildly. For example, an expense such as rent, which is specified in a contract, is easy to estimate for a certain period of time into the future. Cash outflows for items such as telephone, internet and electricity are also usually stable. The amounts paid in previous periods can be checked, and estimates of future outflows are easy.

Other predictions are very difficult to make. Perhaps the most difficult one is the sales forecast and the cash flows that result from such sales. The accounting records from the same period last year may provide a starting point, but management should conduct market research on a periodic basis to help plan the future of the business.

Market research can consider questions such as:

- Is the business likely to continue to trade as successfully as it did last year?
- Is the business planning a major change in the way it operates? For example, should it offer sales online?
- Does the business plan to sell the same inventory lines, or will it experiment with an expanded range of products?
- Does the business plan to eliminate some slow-moving inventory lines?
- Are there new competitors in the market – either generally or in the local area?
- Are there any external factors that are likely to affect the business (e.g. government decisions, the state of the economy, environmental factors)?

Once a business has taken these and other factors into account, it should be able to make an informed estimate of sales. Like any form of budgeting, it's still only an estimate and it isn't expected to be perfectly accurate. However, as the sales forecast is used in other forms of budgeting, management should ensure that all relevant information is available before it finalises its sales estimates. An informed decision is more likely to result in an accurate budget than one based on guesswork where there is a lack of information.

20.3 Extended example: Preparing a budgeted cash flow statement



If a trading business buys and sells on credit, sales and purchases won't automatically equate to cash flows. As a budgeted cash flow statement predicts future inflows and outflows of cash, management predicts not only future sales and purchases, but also when those transactions will result in a movement of cash.

This extended example examines the processes involved in determining cash flows from future transactions.

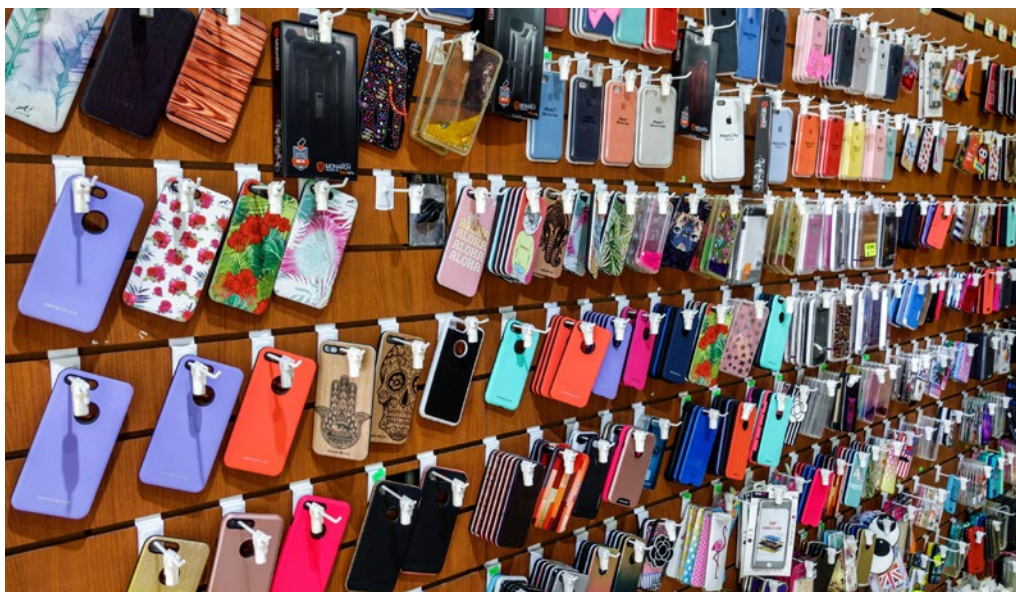
Stephen O'Shea is the owner of Smart Screen, a small business that sells smartphone cases and screen protectors. O'Shea is thinking of purchasing a new computer system for his business at a cost of about \$2000. On 1 July 2028, the business's bank account has a debit balance of \$250. O'Shea needs to prepare a quarterly budget (July–September) to help him determine when he can buy the computer.

After extensive market research and studying last year's figures, O'Shea believes that the following sales estimates will be reasonably accurate.

SALES INFORMATION (INCLUDING 10% GST)

Actual	April	\$10 450
	May	\$10 450
	June	\$11 000
Estimated	July	\$11 000
	August	\$13 200
	September	\$15 400

Estimates of the sales expected by a business act as the starting point of the budgeting process.



Based on past experience, 70% of total sales are made on a cash basis and 30% on credit. When sales are made on credit, 60% of accounts receivable pay in the month after the sale has occurred, 25% pay in the second month after sale, and the remaining 15% usually pay in the third month after sale.

In order to satisfy the above sales requirements, O'Shea estimates that the following purchases will be required.

PURCHASES INFORMATION (INCLUDING 10% GST)

Actual	May	\$6 600
	June	\$6 600
Estimated	July	\$7 700
	August	\$8 800
	September	\$9 900

O'Shea normally purchases all his inventory requirements on 30 days' credit. Of these credit accounts, he usually settles 90% in the month after purchase to take advantage of a 2% discount. He pays the remaining 10% in the second month after purchase.

O'Shea also has other regular cash payments, as shown in the following table.

Wages paid to an assistant	\$380 per week
Advertising	\$200 per month, plus GST of \$20
Window cleaning	\$60 per week, plus GST of \$6
Cash drawings	\$500 per week

In addition, insurance on the shop is due for payment on 1 July and is expected to be \$600, plus GST of \$60. O'Shea also has a telephone bill for \$180 (plus GST of \$18), which is due on 27 June. He intends to pay the account in the first week of July. The business also owes the Australian Taxation Office (ATO) \$500 for GST, and this is due by 28 July.

Expected cash inflows

The first step in preparing a budgeted cash flow statement for Smart Screen is to determine the cash flows that are expected as a result of sales. As both cash and credit sales are made, it's important to calculate the dollar value for each of these items. Table 20.2 shows these expected cash inflows/credit sales.

Table 20.2 Smart Screen's expected cash inflows

Month	Total sales \$	Cash sales 70% \$	Credit sales 30% \$
April	10 450	7 315	3 135
May	10 450	7 315	3 135
June	11 000	7 700	3 300
July	11 000	7 700	3 300
August	13 200	9 240	3 960
September	15 400	10 780	4 620

The cash sales figures for July, August and September shown in the table will go directly into the budgeted cash flow statement, as this is the period under examination. Note, however, that the figures for cash sales include the GST collected by the business. When preparing a cash budget, the GST collected is shown separately from the cash sales figures.

The GST and the cash sales for July, August and September are then determined as follows.

Month	Cash sales (including GST) \$	GST collected (sales/11) \$	Sales per month (excluding GST) \$
July	7 700	700	7 000
August	9 240	840	8 400
September	10 780	980	9 800

As credit sales aren't a cash flow, a further step is required to determine when accounts receivable are likely to pay their accounts. A **schedule of collections** from accounts receivable (see Figure 20.1) is used to calculate the expected cash flow resulting from credit sales staggered over a three-month period.

Looking at June as an example, the \$3300 worth of credit sales are expected to be collected as follows:

- 60% in July (\$1980)
- 25% in August (\$825)
- 15% in September (\$495).

April's credit sales are relevant to the collections schedule because 15% of those sales are expected to be collected during July, which is part of the quarterly budget period.

Note that as 60% of April's sales are collected in May and 25% in June, the amounts received in these months aren't relevant to the July–September period. Only those receipts expected in July (i.e. 15% of April's sales) have been recorded in the schedule because they will result in cash flows during the budget period.

September's credit sales are also irrelevant to the collections schedule because they are expected to result in cash receipts during October, November and December.

schedule of collections
a table used by businesses that sell on credit to predict cash inflows from accounts receivable

Figure 20.1 Schedule of collections from accounts receivable

Month	Credit sales \$	Collections in:		
		July \$	August \$	September \$
April	3 135	470		
May	3 135	784	470	
June	3 300	1 980	825	495
July	3 300		1 980	825
August	3 960			2 376
Total predicted to be received from credit sales		3 234	3 275	3 696

60% of June's credit sales are expected to be collected in July.

25% of June's credit sales are expected to be collected in August.

15% of June's credit sales are expected to be collected in September.

Expected cash outflows

After determining the anticipated cash receipts, the next step is to find the expected cash outflows that result from the business's credit purchases. Prepare a schedule showing anticipated payments to accounts payable using the data given earlier, as shown in Figure 20.2.

Figure 20.2 Schedule of payments to accounts payable

Month	Credit purchases \$	Payments in:		
		July \$	August \$	September \$
May	6 600	660		
June	6 600	5 821	660	
July	7 700		6 791	770
August	8 800			7 762
Total to be paid to suppliers		6 481	7 451	8 532

90% of June's credit purchases are expected to be paid in July and these payments qualify for a 2% settlement discount.

10% of June's credit purchases are expected to be paid in August (two months after purchase).

schedule of payments

a table used by businesses that purchase inventory on credit to help predict cash outflows to accounts payable

The **schedule of payments** to accounts payable is based on Smart Screen's usual pattern of payments. Note that when the payment occurs in the month after purchase, the 2% discount has been deducted as this isn't a cash outflow.

Using the month of June as an example, 90% of the credit purchases are expected to be paid in July, when the discount will be received.

Accounts to be paid are:	90% of \$6600	= \$5 940
Less the discount available:	2% of \$5940	= \$119
Actual cash payment anticipated		= \$5 821

The purchases in May are relevant to the budget period because 10% of those purchases are expected to be paid in July (i.e. two months after purchase). As all purchases are made on a credit basis, the schedule doesn't include purchases expected to be made in September, as they are assumed to be paid in October and November.



Budgeted cash flow statement

Having completed schedules to determine the cash flows involving both accounts receivable and accounts payable, the budgeted cash flow statement can now be prepared, as shown in Figure 20.3. Note that the GST collected as part of cash sales is reported separately.

Figure 20.3 Quarterly budgeted cash flow statement

SMART SCREEN: BUDGETED CASH FLOW STATEMENT FOR QUARTER ENDING 30 SEPTEMBER 2028			
	July	August	September
	\$	\$	\$
Cash flows from operating activities			
Cash sales	7 000	8 400	9 800
Collections from accounts receivable	3 234	3 275	3 696
GST received	700	840	980
Payments to accounts payable	(6 481)	(7 451)	(8 532)
Wages – assistant	(1 520)	(1 520)	(1 520)
Advertising	(200)	(200)	(200)
Window cleaning	(240)	(240)	(240)
Insurance	(600)		
Telephone	(180)		
GST settlement	(500)		
GST paid	(122)	(44)	(44)
<i>Net cash provided by operating activities</i>	1 091	3 060	3 940
Cash flows from investing activities			
Nil	–	–	–
Cash flows from financing activities			
Cash drawings	(2 000)	(2 000)	(2 000)
<i>Net cash used by financing activities</i>	(2 000)	(2 000)	(2 000)
Net increase (decrease) in cash held	(909)	1 060	1 940
Cash held at beginning of month	250	(659)	401
Cash held at end of month	(659)	401	2 341

Cash budgets broken down on a month-by-month basis provide more information than a budget based on quarterly figures.

As budgets are based on estimates, it is acceptable to round off all amounts to the nearest dollar. (Cents are highly unlikely to influence decision-makers and can therefore be omitted from budgeted figures.)

As the final bank balance is shown for each month, cash shortages can be easily identified and acted upon.

The format of this budgeted cash flow statement is preferable to just adding up all receipts and payments for the quarter and presenting them as one figure. Instead, this report allows management to calculate an estimated cash balance at the end of each month.

It also provides information in relation to the three areas of cash flows. The increase in cash flows from operations is clearly a positive trend. It's also clear that the bank account is expected to move from an opening balance of \$250 at the start of July to an estimated overdraft of \$659 by the end of July. This is then expected to improve to a positive balance of about \$400 by 31 August and to \$2341 by 30 September.

O'Shea should therefore buy the computer system in September. As the system is expected to cost about \$2000, there won't be sufficient cash during July or August, assuming that the budget estimates are accurate.

Budgeting for GST liability

Remember that when a business collects GST on its sales, it must send this money (less any GST it has paid) to the ATO at some point. All business owners must ensure that they keep sufficient cash in their accounts to be able to meet their GST liability.

In the case of Smart Screen, the business will have a GST liability after the transactions of July, August and September. O'Shea must decide whether to wait until after September to buy the computer or, if this isn't satisfactory, alter his plans after considering the information revealed by the budgeted cash flow statement. This may lead him to decide to:

- make an additional capital contribution
- cut back on the level of personal drawings
- reduce and/or postpone the payment of expenses
- borrow the required cash from an outside party (e.g. a bank)
- lease, rather than purchase, a computer.

Surplus cash balances

A budgeted cash flow statement might indicate that a business will have surplus cash available in future reporting periods. In this case, management has to decide how best to use the cash. It might:

- reduce its debt by paying off some liabilities
- purchase non-current assets
- purchase inventory for cash, taking advantage of discounts that may be available
- take the opportunity, while the business can afford it, to withdraw cash for personal use.

The basic role of a budgeted cash flow statement is to determine if, at the end of a given period, a business is likely to have a shortage or a surplus of cash. Management must then respond to ensure that the business's plans won't fail simply because of a shortage of cash when it's required.

The budgeted cash flow statement also has links with the budgeted income statement and the budgeted balance sheet. Many cash flows are also revenues or expenses and will appear in a budgeted income statement as well. (For example, a cash sale is also a revenue item, and wages is also an expense item.)

The estimated cash balance, as determined by the budgeted cash flow statement, goes straight into the budgeted balance sheet since it represents the expected value of the current asset Cash at Bank, at one point in the future.

EXAM-STYLE QUESTION

Explain two advantages of preparing budgeted data monthly, rather than quarterly. (2 marks)

Sample answer

<i>First advantage: Budgets prepared monthly should prove to be more accurate than quarterly ones. The shorter the period, the more accurate the estimates should be.</i>
<i>Second advantage: When budgets are prepared monthly, management can take corrective action quickly if a problem arises. This is preferable to waiting until the end of a quarter, when the problem may be worse.</i>





Exam advice

This question is a timely reminder that theory questions may be asked on any area of the study design. Many budgeting questions are quite lengthy and involve multiple calculations. However, you should always make sure that you have revised the theoretical aspects of the course as well.

Don't underestimate the value of theory questions! Although there are no set rules for VCE Accounting exams, most papers consist of 30–40% theoretical-type questions. Some questions, like the example shown above, require short responses and are an opportunity to pick up quick marks. Always be ready for both practical and theory-type questions.

20.4 Budgeted income statements

A **budgeted income statement** is used to examine the predicted revenues and expenses of a business over a given period of time. While the budgeted cash flow statement looks at the business's future cash position, the budgeted income statement looks at its likely profitability. Most small businesses hope to make a profit, so management should have information about future earning potential.

The format of the budgeted income statement is exactly the same as the historical type of profit report. The only difference is that the dollar values in the budgeted report are *predicted* results, rather than historical fact.

It's important to distinguish between the items relevant to a budgeted cash flow statement and those used to prepare a budgeted income statement.

- The budgeted income statement reports on future estimates of revenue to be earned and expenses to be incurred.
- The budgeted cash flow statement reports on all expected cash inflows and outflows, whether or not the items involve revenues or expenses.

Table 20.3 highlights the differences between the two types of reports.



budgeted income statement
an accounting report that shows estimates of revenues, expenses and profit over a specific future period

A budgeted income statement helps a business to set goals.

Table 20.3 Comparison of the items relevant to a budgeted cash flow statement and a budgeted income statement

Included in a budgeted income statement	Included in a budgeted cash flow statement
Revenue earned	Revenue received
Expenses incurred	Expenses paid
Credit sales	Collections from accounts receivable
Cost of sales	Payments to accounts payable/suppliers
Depreciation of non-current assets	Cash paid for new assets
Inventory losses/gains	Cash from disposal of assets
	Cash from new loans
	Cash paid for loan repayments
	Capital contributions by owner
	Cash withdrawals by owner

Management and the budgeted income statement

A budgeted income statement provides management with a plan of its future trading activities. The plan consists of several smaller budgets – usually a sales budget, a cost of sales budget and an expense budget.

If management isn't satisfied with the budget plan (e.g. if it predicts a net loss), it should make changes to improve the situation before the budget period commences. For example, management may have to re-examine the business's expenses and consider alternatives:

- Should assets be leased, rather than purchased?
- Is there a more efficient way to advertise the business's products?

Or management may have to re-evaluate the inventory the business sells:

- Are all departments or all lines of inventory profitable?
- Can some new lines be introduced to improve profitability?
- Should some lines be eliminated?

Ideally, management should consider these sorts of questions on a continuous basis to improve the performance of the business.

The value of a budgeted income statement is that it forces management to consider the future of the business. It can then set goals for the business, and for departments and individuals within the business. Having set budget targets, management can then measure how well the business is performing in terms of achieving its objectives.

Preparing a budgeted income statement

To demonstrate the preparation of a budgeted income statement, let's again consider the example of Smart Screen. Some of the relevant information was already provided for the budgeted cash flow statement.

- Estimated sales for July were \$11 000: \$7700 cash sales and \$3300 credit sales.
- By removing the GST from these figures, the actual revenue to the business would be cash sales of \$7000 and credit sales of \$3000.
- Around 90% of June purchases are expected to be paid in July, to take advantage of a 2% discount.
- Wages paid to an assistant are \$380 per week.
- Advertising is \$200 per month (plus GST of \$20).
- Window cleaning costs \$60 per week (plus GST of \$6).
- Cash drawings are \$500 per week.
- Insurance on the shop is due for payment on 1 July and is expected to be \$600 for a one-year premium (plus GST of \$60).
- A telephone bill for \$180 (plus GST of \$18), due on 27 June, will be paid in the first week of July. The amount of this bill is typical for a quarterly bill.

Additional information not used for the budgeted cash flow statement:

- Cost of sales is usually 50% of sales revenue, as the business applies a standard mark-up of 100% to its inventory in order to determine its selling prices.
- Depreciation on shop fittings is charged at the rate of 20% per annum, using the straight-line method. On 30 June 2028, the balance of the Shop Fittings account was \$12 000.

Figure 20.4 uses this information to show the estimated revenues and expenses for the month of July.

Figure 20.4 Budgeted income statement

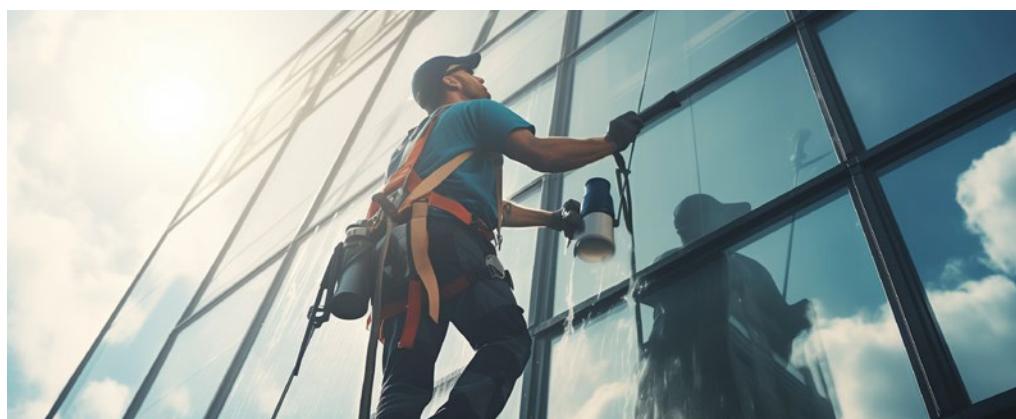
**SMART SCREEN: BUDGETED INCOME STATEMENT
FOR THE MONTH ENDING 31 JULY 2028**

Revenue	\$	\$
Credit sales	3 000	
Cash sales	7 000	10 000
<i>Less: Cost of sales</i>		5 000
Estimated gross profit		5 000
<i>Other revenue</i>		
Discount revenue		119
		5 119
<i>Less: Other expenses</i>		
Wages	1 520	
Advertising	200	
Window cleaning	240	
Insurance	50	
Telephone	60	
Depreciation of shop fittings	200	2 270
Estimated net profit		2 849

A budgeted income statement is based on estimates and therefore the report may not be entirely accurate.

How the estimates were calculated:

- Wages, advertising and window cleaning are exactly the same as the figures in the budgeted cash flow statement because they are paid as they are incurred.
- Insurance expense is \$50, as the \$600 premium is for one year; the expense for July is $\$600 \div 12 = \$50$.
- The quarterly telephone bill is usually \$180; the estimated expense for one month is $\$180 \div 3 = \$60$.
- Depreciation of shop fittings is 20% per annum on a cost of \$12 000. The cost for one year is $\$12\,000 \times 0.20 = \$2\,400$, and for one month it would be $\$2\,400 \div 12 = \$200$.
- The discount revenue comes from the settlement of 90% of June's credit purchases. That is, $\$600 \times 0.90 = \$540$ to be settled. Therefore, a discount of 2% of $\$540 = \$118.80$ will be granted by the business's suppliers (rounded off to \$119). This amount wasn't reported in the cash flow statement as it doesn't represent a cash flow.



Wages, advertising and window cleaning are regular and predictable expenses.

Reviewing the budgeted income statement

Once the budgeted income statement is prepared, management should review it in terms of the business's desired profit level. If the results fit with management's overall objectives, the budget should be adopted and put into action. If it's unsatisfactory, it needs to be reviewed and amended until management is happy with the goals in the budget. There is little use in preparing a budget if the organisation's staff won't accept it. A budget must be a workable document that is based on attainable goals.

The budgeted income statement is a plan for the future profitability of a business. Once it is finalised, management should view it as providing a target that specifies a high level of performance.



20.5 Budgeted balance sheets

budgeted balance sheet

an accounting report that shows estimates of assets, liabilities and owner's equity at a specific future date

The **budgeted balance sheet** is a statement of a firm's predicted financial position at a particular date in the future. This statement can be used for a variety of purposes, such as:

- reporting on the future situation of a business's non-current assets (i.e. capital spending)
- examining the future liquidity position of the business
- evaluating the gearing of the business in the future (i.e. the extent to which it relies on borrowed funds)
- showing the future details of the owner's equity in the business, including details of future profits and drawings.

The format of a budgeted balance sheet is virtually the same as that of the traditional report. The only difference is that the dollar values are based on estimates of future events, rather than historical results.

If a business plans to expand, the expected changes in assets can be clearly shown in a budgeted statement. There would also be changes expected in the equities side of the report. Additional liabilities may be created, or the owner's equity may be increased to fund the purchase of the new assets.

The budgeted balance sheet can be classified in the usual way, allowing management to examine changes in liquidity. The estimated future current assets can be compared with the expected current liabilities. This helps management to ensure that its future plans won't adversely affect the business.

The results of liquidity analysis from a budgeted balance sheet should be read together with a budgeted cash flow statement to ensure the firm will be liquid enough to meet its needs into the future.

A budgeted balance sheet helps to predict the effects of expanding and buying more assets.



Preparing a budgeted balance sheet

In order to demonstrate the preparation of a budgeted balance sheet, we will again use Smart Screen as an example.

A logical starting point is the most recent historical statement. This report provides factual data about the business at one point in time. Having established the actual financial position of the business, management can then use this data to make predictions for the future. These predictions take into account what is likely – or expected – to happen to the business.

The historical report is provided in Figure 20.5.

Figure 20.5 Historical balance sheet

A budgeted balance sheet follows the same basic format as the traditional balance sheet, including the usual classifications.

SMART SHEET: BALANCE SHEET AS AT 30 JUNE 2028

Current assets	\$	\$	Current liabilities	\$	\$	\$
Cash at bank	250		Accounts payable		7 260	
Accounts receivable	5 024		GST clearing		500	
Inventory	21 000	26 274	Accrued telephone expense		180	7 940
Non-current assets			Owner's equity			
Shop fittings	12 000		Capital	25 000		
Less: Accumulated depreciation	2 400	9 600	Net profit	4 934	29 934	
			Less: Drawings		2 000	27 934
		35 874				35 874

The preparation of the budgeted cash flow statement and budgeted income statement for Smart Sheet also includes much of the work required for the budgeted balance sheet.

The following information has been extracted from the previous two budgets.

Accounts receivable

The budgeted cash flow statement states that the Cash at Bank account balance as at 31 July is expected to be \$659 overdrawn. The Accounts Receivable amount at the beginning of July was \$5024.

The budgeted income statement states that credit sales during July are expected to be \$3000. GST charged to accounts receivable will therefore be \$300.

The budgeted cash flow statement states that receipts from accounts receivable during July are estimated to be \$3234. Thus, the final accounts receivable balance is expected to be $\$5024 + \$3000 + \$300 - \$3234 = \$5090$.

This figure may be found by reconstructing the Accounts Receivable account.

ACCOUNTS RECEIVABLE

		\$			\$
1 Jul	Balance	5 024	31 Jul	Cash at Bank	3 234
31 Jul	Sales/GST clearing	3 300		Balance	5 090
		8 324			8 324
1 Aug	Balance	5 090			

Inventory

Inventory at the start of July was \$21 000. Purchases during July are expected to be \$7000 (original data provided for the budgeted cash flow statement) and cost of sales for July is predicted to be \$5000 (budgeted income statement). Therefore, inventory as at 31 July can be determined as $\$21\,000 + \$7\,000 - \$5\,000 = \$23\,000$.

An Inventory account can be used to determine this final balance, as shown.

INVENTORY					
		\$			\$
1 Jul	Balance	21 000	31 Jul	Cost of sales	5 000
31 Jul	Accounts payable	7 000		Balance	23 000
		28 000			28 000
1 Aug	Balance	23 000			

Accounts payable

Accounts payable as at 30 June were \$7260. During July, credit purchases are expected to be \$7000, plus GST of \$700, and payments to accounts payable are estimated as \$6481. (Discount revenue on these payments totalled \$119.) The balance of accounts payable can be estimated as $\$7\,260 + \$7\,000 + \$700 - \$6\,481 - \$119 = \$8\,360$.

The Accounts Payable ledger account can also be used to find this final balance.

ACCOUNTS PAYABLE					
		\$			\$
31 Jul	Cash at bank	6 481	1 Jul	Balance	7 260
	Discount revenue	119	31 Jul	Inventory/GST clearing	7 700
	Balance	8 360			
		14 960			14 960
			1 Aug	Balance	8 360

GST liability

The GST liability as at 30 June was \$500, and was expected to be paid in July. The GST events expected in July are:

- GST received on cash sales: \$700
- GST charged on credit sales: \$300
- GST charged on credit purchases: \$700
- GST paid on expenses: \$122.

This information can all be reconstructed in a GST Clearing account to determine the final GST liability or refund due at the end of July 2028, as shown.

GST CLEARING					
		\$			\$
31 Jul	Accounts payable	700	1 Jul	Balance	500
	Cash at bank	122	31 Jul	Cash at bank	700
	Cash at bank	500		Accounts receivable	300
	Balance	178			
		1 500			1 500
			1 Aug	Balance	178

Other estimates

- Accumulated depreciation of shop fittings is to increase by \$200 (from the budgeted income statement).
- Prepaid insurance will be created during July. The insurance payment of \$600 is for a one-year premium. An amount of \$50 will be written off as an expense for July, with the other \$550 being a prepaid expense as at 31 July.
- The Telephone account is paid quarterly, so one month's expense will be owing at the end of July. A current liability of \$60 ($\$180/3$) will be created on 31 July.
- In relation to the owner's equity, the estimated profit for July is \$2849 and the owner's drawings are expected to be \$2000 during the month of July.

Taking into account all the above budget estimates, the budgeted balance sheet for Smart Screen can be prepared as shown in Figure 20.6.

Figure 20.6 Budgeted balance sheet

SMART SCREEN: BUDGETED BALANCE SHEET AS AT 31 JULY 2028						
Current assets	\$	\$	Current liabilities	\$	\$	\$
Accounts receivable	5 090		Bank overdraft		659	
Inventory	23 000		Accounts payable		8 360	
Prepaid insurance	550	28 640	GST clearing		178	
			Accrued telephone expense		60	9 257
Non-current assets						
Shop fittings	12 000		Owner's equity			
Less: Accumulated depreciation	2 600	9 400	Capital	27 934		
			Net profit	2 849	30 783	
			Less: Drawings		2 000	28 783
		38 040				38 040

Reviewing the budgeted balance sheet

Once a budgeted balance sheet is prepared, it can be compared with the latest historical report. This allows management to identify the key changes expected to occur in the budget period.

For example, changes in the liquidity or the gearing of the firm can be highlighted. If necessary, management can take appropriate action, such as making changes to the budget plan. Or, if the problems aren't seen as serious, management may simply monitor the situation in the future to make sure it meets expectations.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [20.1]** Budgeting is a means of planning and controlling the future financial transactions of a business. All businesses need to prepare budgets as part of management's basic financial plan. There are many types of budgets, all with different purposes.
- [20.3]** A budgeted cash flow statement looks at the future cash inflows and outflows of a business. This statement is particularly important for trading businesses, which make a significant investment in inventory.
- [20.4]** A budgeted income statement is used to examine predicted revenues and expenses over a period of time. It allows management to investigate the likely profitability of the business.
- [20.5]** A budgeted balance sheet is a statement of a firm's predicted financial position at a particular date in the future. It is used to help management ensure that future plans won't adversely affect the business.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Schedule of collections from accounts receivable

Paul Goss is the owner of Box Hill Gym Equipment. He wants to prepare a budgeted cash flow statement for his business but isn't sure how to estimate the cash collections from his credit sales. He supplies the following information and asks for your help.

Credit sales for the previous two months	May	\$9 000
(including GST)	June	\$10 000
Estimated future sales	July	\$11 000
(including GST)	August	\$11 000
	September	\$13 000

The past history of the business's accounts receivable shows that 80% of accounts are usually settled in the month after sale and 18% are usually paid in the second month after sale. The business has had a problem with bad debts, and the remaining 2% is unlikely to be collected.

Prepare a schedule of collections from accounts receivable to show the estimated cash flows for the quarter ending 30 September 2028.

2 Schedule of collections from accounts receivable

The owner of Capri Jewellery, Cecilia Mandanici, asks you to prepare estimates of the future cash inflows for her business. The shop sells on both a cash and a credit basis, with cash sales usually being 60% of total sales. Based on her experience in running the business, Mandanici informs you that accounts receivable usually pay as follows:

- 70% of accounts receivable pay in the month following sale and are allowed a discount of 2% on their accounts
- 20% of accounts receivable pay in the second month after sale
- 10% of accounts receivable pay in the third month after sale.

Mandanici also supplies the following sales data, which includes GST.

Actual sales:	July	\$12 000
	August	\$12 000
	September	\$14 000
Estimated sales:	October	\$15 000
	November	\$16 000
	December	\$20 000

- Prepare a table showing the breakdown between credit and cash sales for the six months from July to December.
- Prepare a schedule of collections from accounts receivable for the quarter ending 31 December. (Round off amounts to the nearest dollar.)
- Using your calculations from parts **a** and **b**, prepare a budgeted cash flow statement extract showing the estimated cash receipts for Capri Jewellery for the months of October, November and December. (Round off all amounts to the nearest dollar.)
- Explain the role market research should play in the preparation of a budgeted cash flow statement.



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3 Schedule of payments to accounts payable

Bait-Up Fishing and Tackle usually purchases 80% of its inventory requirements on credit and the other 20% on a cash basis. When goods are purchased on credit, 90% of debts are settled in the month after purchase, with the other 10% usually being paid in the second month.

The following data relates to the purchases over the last two months and the budget estimates for the next two months. All amounts include 10% GST.

Actual purchases:	May	\$8 450
	June	\$8 260
Budgeted purchases:	July	\$8 500
	August	\$9 200

- Prepare a schedule showing the breakdown of total purchases into cash and credit purchases for the months May to August.
- Prepare a schedule of payments to accounts payable for the two-month budget period of July and August.
- Draw up a budgeted cash flow statement extract for July–August to show the estimated payments that will result from your answers to parts **a** and **b**.



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4 Schedules for collections and payments

The following information relates to Verri's Pet Products, a retail store owned and operated by Jonathan Verri. His shop sells a range of pet carriers and kennels. GST has been included in all sales and purchases data.

		Sales \$	Purchases \$
Historical data:	January	12 000	6 000
	February	15 000	8 000
	March	16 000	7 500
Projected data:	April	14 000	7 000
	May	13 000	6 500
	June	12 000	6 200

- Verri buys 90% of the shop's inventory on credit and pays all accounts payable in the month after purchase to take advantage of a 2.5% discount.
 - Cash sales usually make up about 65% of total sales.
 - Of the credit sales made by the shop, 50% are usually collected in the month after sale. Accounts receivable who pay within this time are allowed a 3% discount on their accounts.
 - Normally, 40% of accounts receivable accounts are collected in the second month after sale, and 9% pay three months after the sale has occurred.
 - The business suffers bad debts of around 1% of total credit sales.
- Prepare appropriate schedules to determine the expected cash flows for Verri's Pet Products for the period April–June.
 - Using the schedules from part **a**, state the relevant entries that would appear in a budgeted cash flow statement for the quarter ending 30 June.
 - Are bad debts reported in a budgeted cash flow statement? Explain your answer fully.

5 Reconstruction of accounts receivable

Toorak Tractors has accounts receivable of \$5400 on 1 October 2028. The total sales made during October 2027 were \$6200, plus GST of \$620. So far, the sales made in 2028 have been consistently 15% up on the sales made in the same month the previous year.

Credit sales make up about 40% of Toorak Tractors' total sales. Management is concerned about a number of slow-paying customers and has decided to crack down on them during October. As a result, accounts receivable are expected to be only \$3200 by the end of October. Discounts allowed to accounts receivable during October are expected to total \$82.

- a Prepare the Accounts Receivable account for the month of October 2028 to find the estimated cash collections from accounts receivable during that month.
- b Explain how an age analysis of accounts receivable may assist Toorak Tractors' management.

6 Budgeted cash flow statement

Rachel Matthews is the proprietor of Southern Scuba Supplies. She provides the following information about her business.

On 1 July 2028, the balance of the bank account was \$3400. Revenue over the last two months was as follows (including GST).

May	Cash sales	\$24 000	Credit sales	\$12 000
June	Cash sales	\$28 000	Credit sales	\$10 000

During July, all sales are expected to be 8% higher than the June sales figures. Based on the past experience of the business, 60% of credit customers pay in the month after sale, with the other 40% paying in the second month.

The shop had the following purchases during June (including GST):

- cash \$6000
- credit \$16 000.

During July, Matthews expects to have cash purchases of \$7000, plus GST of \$700, and credit purchases of \$14 000 (plus GST). It's the business's policy to pay all accounts payable in the month following the purchase of goods.

The business has the following regular payments each month.

Advertising	\$1700 plus GST
Wages	\$3200
Drawings	\$3000
Loan repayments	\$2200
Cleaning of premises	\$500 plus GST

The business pays its annual insurance premium of \$3400, plus GST of \$340, in two instalments, one being due on 16 January and the other on 16 July each year.

Matthews has also decided to renovate the shop and must make a payment of \$8000 (plus GST of \$800) to the builder on 31 July 2028 and another payment of \$6000 (plus GST of \$600) on 31 August 2028, when the job should be finished.

- a Prepare a budgeted cash flow statement for Southern Scuba Supplies for the month of July 2028.
- b Comment on the business's cash position, given the second payment for the renovations is due in August 2028.



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7 Budgeted cash flow statement

Hepburn Springs Hardware is a small business that sells hardware to the general public. The owner, Michael Gerace, is concerned about the liquidity of the business, as there is only \$230 in the bank on 30 September 2028, but he has never prepared a formal budgeted cash flow statement. You've been asked to provide assistance.

The following financial data is available.

		Sales (incl. GST) \$	Purchases (incl. GST) \$
Historical data:	July	14 000	6 000
	August	12 000	6 000
	September	14 000	7 000
Budgeted data:	October	18 000	9 000
	November	18 000	10 000
	December	20 000	10 000

The business purchases all its inventory on credit and usually pays for these goods in the month after purchase to take advantage of a 2% discount. The business's sales are made on both a cash and a credit basis, with credit sales making up only about 20% of the total sales.

The accounts receivable of the business usually pay in the following pattern:

- 60% in the month after sale
- 30% in the second month
- 10% in the third month.

The business has the following regular expenses:

- wages: \$350 per week
- advertising: \$800 per month (plus GST of \$80)
- cleaning: \$130 per week (plus GST of \$13)
- office expenses: \$50 per week (plus GST of \$5)
- depreciation of shop fittings: \$300 a month.

Gerace usually withdraws about \$600 cash and \$100 worth of inventory each week for personal use.

In addition to the regular advertising, Gerace also plans on spending \$1000 (plus GST of \$100) on additional advertising in the first week of December to try to boost the shop's share of Christmas trading. During October, he plans to buy a new computer for the business at a cost of about \$3000 (plus GST of \$300).

Rates on the business property are due on 15 November and are expected to be \$650. The business also has monthly loan repayments of \$800 per month.

- Prepare appropriate schedules and calculate the anticipated payments to accounts payable and estimated collections from accounts receivable.
- Prepare a budgeted cash flow statement for the quarter ending 31 December 2028. Show the estimated bank balance at the end of each month. (Note that GST isn't payable on rates.)
- Comment on the business's liquidity in light of the owner's concerns.

8 Reconstruction of accounts receivable, inventory and accounts payable

Penni Roe is the owner of Western Solar Panels. She wants to plan for the next quarter's trading activities and provides some financial data from the business.

The following information was extracted from the balance sheet as at 30 June 2028.

Balance of inventory	\$42 800
Balance of accounts receivable	\$6 400
Balance of accounts payable	\$4 600

During the quarter ending 30 September 2028, Roe estimates that the business will have total sales of \$86 000, plus GST of \$8600. Cash sales usually make up 75% of the total sales made. The business sells its inventory at a 100% mark-up. (That is, the cost price of an item is doubled in order to determine its selling price.)

By the end of the September quarter, the following balances are expected to be reported in the business's balance sheet.

Balance of inventory	\$46 400
Balance of accounts receivable	\$5 800
Balance of accounts payable	\$5 200

- Prepare the Accounts Receivable account to calculate the estimated receipts expected from accounts receivable for the quarter ending 30 September 2028.
- Complete the Inventory account to determine the credit purchases expected to be made during the quarter.
- Prepare the Accounts Payable account to provide an estimate of the cash to be paid to accounts payable during the quarter ending 30 September 2028.
- Using the above information, list all items relevant to the budgeted cash flow statement of Western Solar Panels for the September quarter. State the dollar amount for each item listed.
- Using the above information, list all items relevant to the budgeted income statement for this business. State the dollar amount for each item for the September quarter.

9 Reconstruction of inventory and accounts payable

Tony Gleeson is the proprietor of Brunswick X-Sports. He needs to plan his future cash flows but isn't sure how to determine some of them.

The following information is available.

Balance of inventory 1 October 2028	\$24 200	
Balance of inventory 31 October 2028	\$27 800	
Balance of accounts payable 1 October 2028	\$6 250	
Balance of accounts payable 31 October 2028	\$5 760	
Returns of inventory to suppliers expected during October	\$250	(GST \$25)
Discounts expected to be received from suppliers during October	\$150	
Sales expected during October	\$12 600	(GST \$1260)
Cost of sales expected during October	\$6 800	

- Prepare the Inventory account, showing all expected entries for October 2028.
- State the value of credit purchases expected to be made during the month.
- Prepare the Accounts Payable account for October 2028, showing all anticipated transactions that affect the business's accounts payable.
- State the cash flow expected to be made to accounts payable during October 2028.



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10 Preparation of budgeted reports

Jeremy Corby, the owner of Highpoint Hi-Fi Systems, supplied the following information.

HIGHPOINT HI-FI SYSTEMS: BALANCE SHEET AS AT 30 JUNE 2028

Assets	\$	\$	Liabilities	\$	\$
Cash at bank		2 000	Accrued advertising	200	
Accounts receivable		4 800	Accounts payable	9 200	
Inventory		32 000	GST clearing	1 000	
Furniture		2 500	Loan: CBA	6 000	16 400
Shop fittings	15 000		Owner's equity		
Less: Accumulated depreciation	3 000	12 000	Capital		36 900
		53 300			53 300

- Sales for the month of July are expected to be: cash \$15 000 (plus GST of \$1500) and credit \$5400 (plus GST of \$540). All accounts receivable usually pay in the month after sale and are granted a 2.5% discount.
 - Purchases are all made on credit, and in July they are expected to be \$11 200, plus GST of \$1120. All accounts payable are paid in the month after purchase.
 - Inventory is expected to increase by \$1000 during July 2028.
 - The regular monthly expenses of the business include wages \$1200, office expenses \$300 (plus GST of \$30) and advertising \$200 (plus GST of \$20). All these items will be paid on time during July, along with the \$200 of advertising owing for June (plus GST of \$20).
 - Rent is payable on the first day of each month at a cost of \$3000 per month (plus GST of \$300 per month).
 - Depreciation of shop fittings is charged at the rate of 20% per annum on cost.
 - Interest on the loan from CBA is charged at the rate of 10% per annum and is payable on the last day of March, June, September and December. The principal of the loan is due for repayment in a lump sum on 30 June 2029.
 - A delivery van will be purchased in the last week of July 2028. The van is expected to cost \$22 000, plus GST. The vehicle purchase will be partly funded by a loan of \$10 000 from NAB. The loan is due for repayment in July 2029.
 - Corby usually withdraws \$500 per week from the business for personal use.
- Prepare a budgeted cash flow statement for the month of July 2028.
 - Prepare a budgeted income statement for the month ending 31 July 2028. (*Hint: Reconstruct the Inventory account to determine the cost of sales for the period.*)
 - Prepare a budgeted balance sheet as at 31 July 2028. (*Hint: Prepare the GST Clearing account to determine its final balance.*)
 - 'Profit isn't cash.' Comment on this statement and refer to examples from the budgets you prepared in parts **a** and **b**.

11 Preparation of budgeted reports

Annemarie Burgess is the owner of Kayaks Deluxe. She provides the following information in relation to the business.

KAYAKS DELUXE: BALANCE SHEET AS AT 30 SEPTEMBER 2028

Assets	\$	\$	Liabilities	\$	\$
Accounts receivable		5 400	Cash at bank	620	
Inventory		36 000	Accounts payable	6 000	
Prepaid insurance		720	GST clearing	1 100	7 720
Term deposit (maturing 31/12/29)		26 000			
Shop fittings	12 000		Owner's equity		
Less: Accumulated depreciation	3 600	8 400	Capital		86 800
Delivery van	20 000				
Less: Accumulated depreciation	2 000	18 000			
		94 520			94 520

- As the business has an overdraft on 30 September, Burgess will contribute \$2000 as additional capital on 2 October 2028.
- All of the business's accounts receivable with accounts outstanding as at 30 September are expected to pay during October, with the exception of one account for \$500. Burgess expects this to realise only \$100, and will write the remainder off as a bad debt.
- The accounts payable as at 30 September will all be paid during October. One supplier with a balance of \$2100 has agreed to accept \$2000 in full payment of the account.
- Sales during October are expected to be \$13 200 cash (plus GST of \$1320) and \$6800 on credit (plus GST of \$680). Of the credit sales, about 10% is expected to be collected during October (including the related GST). Although Burgess hopes to receive the remainder in November, she has decided to create an allowance for doubtful debts of \$500 on 31 October.
- Burgess has stipulated that inventory levels are to increase 10% during October. The purchases required to achieve this goal during October will all be made on credit and will be paid during November.
- Management applies a fixed mark-up percentage of 100% to all inventory sold.
- The prepaid insurance of \$720 is the result of a yearly premium of \$960 paid on 1 July 2028.
- The term deposit was taken out on 1 January 2027 and is earning 4% per annum. Interest is payable monthly.
- Depreciation is charged as follows: on the shop fittings 15% on cost per annum; on the delivery van 25% per annum on the reducing balance method.
- Monthly expenses usually incurred by the business are: advertising \$400 (plus GST of \$40), wages \$2400, and rent \$3600 (plus GST of \$360).
- Rent is payable three months in advance on 1 January, 1 April, 1 July and 1 October.
- Wages are paid as incurred, but only half of the advertising cost will be paid during October.
- Burgess expects to be granted a loan during October to purchase a computer system for the business in November. Although she is still shopping around for a system, she estimates that she will apply for approximately \$6000.
- Owner's drawings are usually around \$800 per week.

Using a spreadsheet, complete the following tasks.

- Prepare a budgeted income statement and a budgeted cash flow statement for the month ending 31 October 2028.
- Prepare a budgeted balance sheet as at 31 October 2028.
- Comment on the future of the business using information from your budgets in parts **a** and **b**. Outline any areas of concern or positive features from the three budgets.



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12 Preparation of budgeted reports

Sue McKenna is the proprietor of Flash Photography, a retail outlet selling cameras and video equipment. She has supplied the following financial information and has asked for assistance in preparing the business's budgets.

FLASH PHOTOGRAPHY: BALANCE SHEET AS AT 30 JUNE 2028

Current assets	\$	\$	\$	Current liabilities	\$	\$
Cash at bank		1 700		Accounts payable	8 200	
Inventory		28 000		GST clearing	2 200	
Accounts receivable		8 600		Loan	6 000	16 400
Prepaid rent		6 400	44 700	Owner's equity		
				Capital		43 100
Non-current assets						
Shop fittings	15 000					
Less: Accumulated depreciation	5 000	10 000				
Office furniture	8 000					
Less: Accumulated depreciation	3 200	4 800	14 800			
			59 500			59 500

- Sales for the month of July are estimated to be \$16 200 (plus GST of \$1620), of which 75% will be for cash. None of the credit sales will be settled until August or September.
- Accounts receivable as at 30 June 2028 are expected to pay as follows: 80% should pay during July and will be allowed a 2% discount, and 20% are expected to pay during August.
- McKenna maintains a fixed mark-up on goods sold to ensure that gross profit is equal to one-third of sales revenue.
- Management expects inventory to be up to \$30 000 by the end of July. Purchases will be made on credit to achieve this goal. All credit purchases made by the business are settled in the following month.
- McKenna has arranged for a bank overdraft and has a limit of \$10 000 approved by the bank.
- Rent on the shop is payable three months in advance. The last payment was made on 1 June 2028.
- Wages are usually \$650 per week.
- A quarterly electricity bill for the period July–September is due in the last week of September. It's usually about \$240 per quarter, plus GST.
- Stationery will be purchased for cash during July for \$150, plus GST of \$15. It is all expected to be used by the end of July.
- Shop fittings are depreciated at the rate of 20% per annum using the reducing balance method, and office furniture at 10% per annum using the straight-line method.
- A new computer is expected to be purchased on 31 July 2028 for \$4800, plus GST of \$480. The total owing will be paid on this date.
- The computer is to be depreciated at the rate of 33.3% per annum, using the reducing balance method.
- The loan is an interest-only loan due for repayment on 31 July 2028. Interest of 10% per annum has been paid on the last day of every month for the past two years. The principal must be paid in full on 31 July 2028.
- The owner plans to withdraw \$600 per week in cash.





Using a spreadsheet, complete the following tasks.

- a** Prepare a budgeted cash flow statement for the month ending 31 July 2028.
- b** Prepare a budgeted income statement for the month ending 31 July 2028.
- c** Prepare a budgeted balance sheet as at 31 July 2028.
- d** Comment on the future liquidity position of the business and its future profitability.
- e** Identify three items that appear in the budgeted cash flow statement that don't appear in the business's budgeted income statement.
- f** Identify three items that appear in the budgeted income statement that don't appear in the business's budgeted cash flow statement.

MODELLING EXERCISE

Ben Doyle, the proprietor of Damascus Steel, makes the following predictions for his revenues and expenses for the yearly budget period ending 30 June 2028. The business specialises in high-quality knife sets, which sell for \$200 each.

Revenues	
Cash sales:	350 units @ \$200 = \$70 000
Credit sales:	200 units @ \$200 = \$40 000

Expenses	
Wages – casuals	34 000
Office expenses	2 500
Advertising	5 300
Insurance	2 200
Depreciation	4 000
Inventory losses	5 000

Note: All goods in the business are usually marked up by 100% on cost price.

Doyle is concerned about the profitability of his business and is considering a range of strategies to improve his situation. He makes the following list for you to consider:

- 1 Employ additional casual employees. This will increase wages by 10% but is expected to increase cash sales by 8%.
 - 2 Undertake a new advertising campaign at an additional cost of \$1000 per month. The market research shows that a 10% increase in all sales may be possible.
 - 3 Increase the mark-up on all goods to 110%. This may cost the business some customers, and volume (based on the original estimates) will probably fall by approximately 2% on cash sales and 1% on credit sales.
 - 4 Decrease the mark-up on all goods to 90%. This is designed to attract new customers, and volume (based on the original estimates) is expected to increase both cash and credit sales by 12%.
- a** Using a spreadsheet, prepare a budgeted income statement based on Doyle's original estimates and determine his budgeted net profit for the year. (*Hint:* Include cells for both the number of units sold and the dollar value. This will assist you when completing part **b**. You should also use formulas, when necessary, to determine all values within the spreadsheet.)
 - b** Copy and paste your spreadsheet prepared in part **a** so that you have five versions of the one spreadsheet. Consider each of Doyle's strategies in turn, using a separate spreadsheet for each. You should end up with one spreadsheet that reflects the original situation, plus one for each of the four different strategies.
 - c** Write a report, discussing the anticipated results of the four strategies. Recommend to Doyle what he should do to improve his profit result.
 - d** Doyle is also worried about the level of inventory losses. He has received quotes for a new security system that would include installing cameras around his business. The cost of the system is approximately \$12 000, but Doyle expects his inventory losses would be reduced to about \$500 per year. Should he go ahead and install the security system? Explain your answer fully.



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EXAM-STYLE QUESTIONS

Question 1 (12 marks)

The following balance sheet data has been provided by the owner of Catena's Wholesale Books, a business that buys all its inventory on credit but sells for both cash and on credit.

Item	31 December 2028 (actual)	31 December 2029 (budgeted)
Accounts receivable	12 500	14 600
Accounts payable	12 400	16 000
Capital	125 000	132 000
Inventory	67 000	72 000

The owner expects the following to be achieved in the year ending 31 December 2029:

- a net profit of approximately \$85 000
- credit sales of about \$170 000, plus GST
- cash sales of \$34 000, plus GST
- a mark-up of 100% on all products
- no discounts offered to accounts receivable
- accounts payable always paid on time and discounts of \$2000 granted to Catena.

a Prepare the following general ledger accounts for the budget period ending 31 December 2029:

(9 marks)

- Inventory: to determine credit purchases for the year.
- Accounts Payable: to determine payments to suppliers.
- Accounts Receivable: to determine receipts from customers.
- Capital: to determine the owner's drawings for the year.

b Using the information in your responses to part **a**, and the information provided above, **identify** the relevant items to be reported in the Cash Flows from Operating Activities section of the budgeted cash flow statement for the year ended 31 December 2029.

(3 marks)

Question 2 (4 marks)

Angus Ryan has just finished preparing his budgets for the next year for his jewellery business, but he is somewhat confused. His estimates for his budgeted income statement show a very healthy profit, yet his budgeted cash flow statement is predicting that a bank overdraft will exist within the same period of time.

State four events that could cause this situation to arise in Ryan's budgets.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 21

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Budget variance reports

In this chapter, you will learn about possible variances in a budget, and how to prepare reports that identify their causes.

Learning objectives

By the end of this chapter, you will be able to:

- **identify** both favourable and unfavourable variances [21.1]
- **suggest** possible causes of variances [21.1]
- **prepare** budget variance reports [21.2]

KEY TERMS

Variance (or performance) report

Variance

Favourable (or positive) variance

Unfavourable (or negative) variance

PRIOR KNOWLEDGE

CHAPTER 20: Budgeting



Estimated time required: 1 week





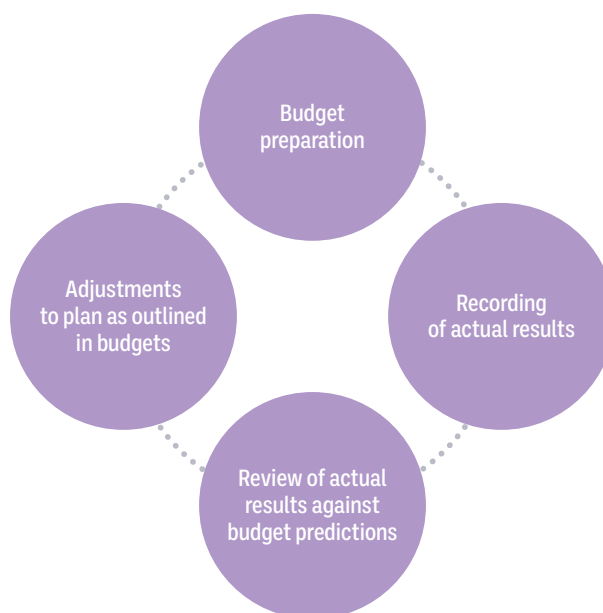
21.1 Reviewing budgets

Budgeting provides management with a plan to follow into future periods that anticipates improvements in the performance of the business. By developing a plan, management should be able to decide if performance is satisfactory or if changes are needed. This is the essence of budgeting; to plan and control future financial events expected by a business and its management.

Regardless of the type of budget being prepared, the budgeting process must remain flexible. As budgets involve predictions of future events, they aren't expected to be perfect and shouldn't be locked in indefinitely. A business must check its performance against its budgets during the course of the budget period as new information becomes available. Budgeting should involve constant review and modifications as the performance of the budget is evaluated.

The complete budgeting process is shown in Figure 21.1.

Figure 21.1 The budgeting process



Budget variance reports

Figure 21.1 emphasises that budgeting should be an ongoing, continuous process. The biggest mistake management can make when preparing a budget is to follow the 'set and forget' approach. There is no point in preparing a detailed budgeting strategy if it's simply going to be filed away somewhere.

A systematic approach to budget review ensures that a business continuously controls its operations and carries out follow-up action as required.

A budget **variance report** (also known as a budget **performance report**) is prepared to show the differences, or **variances**, between budget estimates and actual results. As a budget sets the expectations of management in terms of performance, it is important to review these results.

A budget variance report can be prepared for any type of budget. The report simply states the budgeted figure for an item, the actual results for that item and the variance between the two.

variance (or performance) report an accounting report that compares budget predictions with the actual results achieved

variance the difference between a budget prediction and an actual result

- A **favourable** (or **positive**) **variance** occurs when the result is better than management expected.
- An **unfavourable** (or **negative**) **variance** is a result that is worse than management expected.

For example, if sales were predicted as \$8000, and \$10 000 worth of sales was achieved, this would be a favourable variance. If the sales achieved were only \$7000, this would be an unfavourable variance.

In the case of an expense item, if wages were budgeted at \$3000 and only \$2800 was incurred, this would also be seen as a favourable variance. If, instead, the wages expense was \$3500, this would be an unfavourable variance.

favourable (or positive) variance a situation in which the actual result is better than the result predicted in the budget

unfavourable (or negative) variance a situation in which the actual result is worse than the result predicted in the budget

Managing budget variances

It's often useful to express the variances in both dollar terms and percentages. This helps to identify the more significant variances, as minor variances are always expected to occur. Management should investigate significant variances from budget and make relevant notes for future reference. If a budget contains many variances, management should try to find explanations for these and adjust its future planning.

In large businesses, results above budget expectations are often rewarded. For example, a business may offer incentives to department managers if they achieve exceptional sales results. This helps to reinforce the concept of a budget setting goals for the business.

A budget variance report may also identify areas of concern. There may be cases of overspending where a manager hasn't kept within budget limits. This also requires a reaction from management, but in this case it would be a negative response. Disciplinary action, or perhaps even a demotion, may result from not following the objectives outlined in the budget.

If undesirable results are allowed to go on for too long, there is little chance of a budget being met. Therefore, even when a budget is prepared for a quarterly period, it should be reviewed each month. If results aren't as expected, decisions must be made to get the plan back in line with what's outlined in the budget.



A budget variance report identifies the variance between the budgeted figure for an item and the actual results.



21.2 Preparing budget variance reports

Because budget variance reports are prepared using the information from budgeted statements, we will look back to the business of Smart Screen from Chapter 20 and use its budget statements to demonstrate a budget variance report.

Variance reports have been prepared to show the business's results in the month of July.

Variances in budgeted cash flow statements

The first variance report relates to Smart Screen's budgeted cash flow statement (page 393).

Liquidity is vital to a trading business. In this case, the owner of Smart Screen is concerned that, even though cash sales are up, the final overdrawn balance is an even worse result than the budget anticipated.

The report in Figure 21.2 can help to identify the reasons for this unexpected result. The F/U column notes whether each variance is favourable or unfavourable.

Figure 21.2 Variance report for a budgeted cash flow statement

SMART SCREEN: CASH FLOW STATEMENT VARIANCE REPORT FOR MONTH ENDED 31 JULY 2028						
	Budget	Actual	Variance	F/U	%	Comments
	\$	\$	\$			
Cash flows from operating activities						
Cash sales	7 000	7 700	700	F	10.0	Sunday trading
Collections from accounts receivable	3 234	2 934	300	U	9.3	Bad debt
GST received	700	770	70	F	10.0	Increased sales
Payments to accounts payable	(6 481)	(6 481)	Nil			
Wages – assistant	(1 520)	(1 840)	320	U	21.1	Sunday trading
Advertising	(200)	(200)	Nil			
Window cleaning	(240)	(240)	Nil			
Legal costs	Nil	(200)	200	U	100.0	Re: bad debt
Insurance	(600)	(660)	60	U	10.0	Premium increase
Telephone	(180)	(180)	Nil			
GST settlement	(500)	(500)	Nil			
GST paid	(122)	(128)	6	U	4.9	Insurance increase
Net cash provided by operating activities	1 091	975	116	U	10.6	
Cash flows from investing activities						
Nil						
Cash flows from financing activities						
Cash drawings	(2 000)	(2 400)	400	U	20.0	Car accident
Net cash used in financing activities	(2 000)	(2 400)	400	U	20.0	
Net increase (decrease) in cash held	(909)	(1 425)				
Cash held at beginning of month	250	250				
Cash held at end of month	(659)	(1 175)				

The predicted bank balance at the end of July.

The actual bank balance at the end of July.

Variances are not listed as positive or negative numbers. They are simply the difference between the budget and actual results.

Two items appear in this variance report that the management of Smart Screen apparently ignored in their planning: bad debts and legal costs. These items have now been identified as part of the budget review and should become part of future planning.

On the positive side, management apparently decided to experiment with Sunday trading during July, which saw an increase in cash sales. (Unfortunately, this meant that wages also increased.) This has also been highlighted in the variance report and management should consider this when preparing future budgets.

Because of July's results, the budgeted cash flow statements for August and September, which were originally part of a quarterly budgeted cash flow statement, may also have to be adjusted.

Ideally, at the end of each month, a budget variance report is prepared, followed by a new quarterly report. This achieves the goal of using budgets to continuously update future plans.

EXAM-STYLE QUESTION

Explain how the preparation of a variance report can help management to achieve control over its spending. (2 marks)

Sample answer

A variance report should be prepared regularly to monitor a business's spending. The report can identify areas of success as well as areas of concern. For example, if a report identifies an unfavourable variance in relation to a particular cash outflow, management can take corrective corrective action and reduce spending in that area so that it doesn't get out of hand and cause a shortage of cash.

Exam advice

Practical questions on variance reports are fairly predictable. However, theoretical questions can cover a range of possibilities, such as the link between budgets and variance reports, and how these can help in controlling spending or expenses. It's possible that a question may focus on the generation of revenues and management's performance in this area. Some past questions have focused on the frequency of budgeting and variance reports, while others have focused on the link between variance reports and decision-making. Always keep an open mind and revise all aspects of this area of the course.

Don't focus only on cash management when considering variance reports. These reports may be examined in relation to income statements as well (covered in the next section of this text). Make sure you understand the role played by variance reports and the link between them and management decision-making. You should then be able to apply your knowledge to the report that is the subject of the question.

Variances in budgeted income statements

A budget variance report can also be prepared in relation to a budgeted income statement. This report is used to examine the profit performance of the business against the budget expectations set down at the start of the period. As the budget specifies the predictions of all revenue and expense items, the variance report can be used to highlight the major variations from this budget plan.

Figure 21.3 is the income statement variance report for the month of July.

Figure 21.3 Budget variance report for an income statement

SMART SCREEN: INCOME STATEMENT VARIANCE REPORT FOR THE MONTH ENDED 31 JULY 2028						
	Budget	Actual	Variance	F/U	%	Comments
	\$	\$	\$			
<i>Revenue</i>						
Credit sales	3 000	3 600	600	F	20.0	Sunday trading
Cash sales	7 000	7 700	700	F	10.0	Sunday trading
	10 000	11 300	1 300	F	13.0	
Less: Cost of sales	5 000	5 650	650	U	13.0	Increased sales
Gross profit	5 000	5 650	650	F	13.0	Increased turnover
<i>Other revenue</i>						
Discount revenue	119	119	Nil			
	5 119	5 769				
<i>Less: Other expenses</i>						
Wages	1 520	1 840	320	U	21.1	Overtime
Advertising	200	200	Nil			
Window cleaning	240	240	Nil			
Insurance	50	55	5	U	10.0	Premium increase
Telephone	60	60	Nil			
Bad debts	0	300	300	U	100.0	A/c Rec: I Shiftee
Legal costs	0	200	200	U	100.0	A/c Rec: I Shiftee
Depreciation – shop fittings	200	200	Nil			
Total expenses	2 270	3 095	825	U	36.3	
Net profit	2 849	2 674	175	U	6.1	

Predicted net profit for the month of July.

The actual net profit for the month of July.

Percentages are often used to help identify significant variances. Remember: variances are expected!

This variance report clearly shows the favourable variances achieved in the revenue area. Management has noted the success of Sunday trading in achieving an increase in sales. It also shows the unfavourable results in several expense items such as wages, bad debts and legal costs.

It is important to review every item individually, rather than simply comparing predicted profit with the actual result achieved. Although the budgeted profit figure was only \$175 off the actual net profit for July, many different items caused this variance.

The management of Smart Screen may be happy with this variance report, since the experiment with Sunday trading appears to have produced additional revenue. Unfortunately, this didn't cause a substantial increase in profit, as the business suffered bad debts of \$300 and incurred some unexpected legal costs. However, these events were probably unusual, so management may anticipate improved future trading.

As with all budgeting procedures, the budgeted statements for August and beyond should consider the information from the July variance report. For example:

- The owner should consider making allowance for future bad debts, particularly if the level of credit sales is likely to continue to increase.
- Sales estimates may have to be reviewed if additional trading hours are going to be maintained.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [21.1]** Budgeting should be a continuous process, involving constant review. A business's performance is compared with the budgets as the budget period passes.
- [21.1]** A variance report states the budgeted figure for an item, the actual results for that item and the variance between the two.
- [21.2]** A budget variance report should be prepared at the end of every month, followed by a new quarterly report. This achieves the goal of budgeting as an ongoing process involving future planning that's continuously updated.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



Workbook
p. 355



XL template

1 Variance report: Cash flows

Broadway Formal Wear has the following budgeted cash flows and actual cash flows for the quarter ended 31 December 2028.

	Budget	Actual
	\$	\$
Operating activities		
Cash sales	28 000	32 000
Collections from accounts receivable	10 000	12 000
GST received	2 800	3 200
Cash purchases	(1 200)	(800)
Payments to accounts payable	(18 000)	(22 000)
Wages	(2 700)	(2 500)
Insurance	(600)	(620)
Postage and telephone	(250)	(220)
Electricity	(320)	(340)
GST paid	(587)	(518)
Investing activities		
Purchase of new computer	(3 500)	(3 200)
Financing activities		
Additional capital	4 000	–
Drawings	(6 000)	(5 200)

The business had \$840 in the bank on 1 October 2028.

- Using a spreadsheet, prepare a variance report for the quarter ended 31 December 2028 to reveal the significant differences between the budget and the actual results. Your report should also show the difference in the estimated bank balance and the actual bank balance as at 31 December 2028.
- Identify the items that caused the difference between the budgeted bank balance and the actual bank balances. If possible, suggest reasons for the variances in these items.
- Is a quarterly period appropriate for budgeted cash flow statements? Give reasons for your answer.

2 Variance report: Cash flows

Graeme Digby, the owner of New Age Books, prepares a budgeted cash flow statement on a regular basis. However, he's alarmed to see that his latest bank statement shows an overdrawn balance, when his budget estimated a debit balance of several thousand dollars.

Digby provided the following data and asks you to compare the budgeted and actual figures for the month of July 2028.

	Budget	Actual
	\$	\$
Operating activities		
Cash sales	24 000	28 000
Collections from accounts receivable	12 000	10 600
GST collected	2 400	2 800
Wages	(10 400)	(12 200)
Advertising	(2 200)	(2 800)
Rent	(4 800)	(4 800)
Payments to accounts payable	(13 200)	(14 600)
Telephone	(240)	(200)
Office expenses	(200)	(240)
Cartage outwards	(520)	(600)
GST paid	(796)	(1 264)
Investing activities		
Purchase of display equipment	–	(4 000)
Financing activities		
Drawings	(2 400)	(3 600)
Bank balance start of month	440	440

- Using the data provided, prepare a budget variance report, including variances in dollar amounts and percentages, for New Age Books for July 2028. Your report should be a full statement of cash flows, including the final cash balances.
- Write a report to Digby, explaining why the projected cash figure wasn't achieved. Mention in your report the significant favourable and unfavourable variances from the budget.
- Because of the inaccuracy of the July budget, Digby is sceptical about preparing budgets in the future. He thinks it's a waste of time. Comment on this reaction.



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3 Variance report: Income statement

The following information relates to the business of Salm's Disposal Store.

SALM'S DISPOSAL STORE: INCOME STATEMENT FOR MONTH ENDED 30 NOVEMBER 2028

	Budgeted	Actual
	\$	\$
Revenue		
Cash sales	10 500	8 400
Credit sales	8 000	7 800
	18 500	16 200
Less: Cost of sales	9 000	10 500
Gross profit	9 500	5 700
Less: Other expenses		
Wages – sales staff	2 800	2 900
Advertising	2 600	2 000
Postage and telephone	150	160
Wrappings	360	320
Insurance	430	440
Interest on overdraft	100	140
Depreciation of fittings	800	800
Total operating expenses	7 240	6 760
Net profit	2 260	(1 060)

- Using a spreadsheet, prepare a budget variance report using the budgeted and actual data.
- Write a report to the owner of the business explaining why the predicted profit for November wasn't achieved.



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XL template

4 Variance report: Income statement

The management of Console Kingdom completed an income statement for the month of August 2028 and is surprised by the results. The following comparison of budgeted and actual results is available.

	Budgeted	Actual
	\$	\$
Sales	22 000	26 000
Cost of sales	11 000	13 000
Wages	4 000	6 000
Office expenses	800	850
Rent	2 400	3 200
Bad debts	500	1 000

- Using a spreadsheet, prepare a budget variance report that shows both the budgeted and actual profit figures.
- Comment on the changes in the following items: sales, cost of sales, wages, rent and bad debts.
- Prepare two pie charts to break down the sales dollars into the various expenses and net profit. In one chart, show the budgeted data; in the other, show the actual results.
- Comment on any significant differences between the two pie charts prepared in part c.

5 Budgeted cash flows with account reconstructions

The owner of Benalla Music, Ella Heidi, needs help in preparing her budgeted reports. She has gone through her past records thoroughly and prepared a summary of what's happened and what she expects to happen. However, she is unsure how to determine estimated cash receipts from accounts receivable and estimated cash payments to accounts payable.

The following information is provided.

FROM THE BALANCE SHEET

	Actual 31 July 2028	Predicted 31 August 2028
	\$	\$
Balance of inventory	26 000	36 400
Balance of accounts receivable	2 400	2 800
Balance of accounts payable	8 600	9 600
Balance of cash at bank	3 210	?

FROM THE INCOME STATEMENT

	Actual July 2028	Predicted August 2028
	\$	\$
Cash sales	6 500	6 800
Credit sales	2 750	2 800
Cost of sales	4 500	4 600
Inventory loss	800	500
Wages	1 600	1 800
Office expenses	200	200
Discount expense	110	120
Discount revenue	150	160

- Reconstruct the following general ledger accounts to help Heidi with the preparation of her budgeted cash flow statement: Accounts Receivable, Inventory, and Accounts Payable. (Don't forget to allow for GST of 10% on all sales and purchases.)
- Using the above information, plus your reconstructions from part **a**, prepare a budgeted cash flow statement (extract) to show cash flows from operating activities for Benalla Music for the month ending 31 August 2028.
- Taking into consideration your budgeted statement from part **b**, comment on the likely future cash position of this business.
- Prepare a budgeted income statement for the month ending 31 August 2028.
- Write a brief report on the future performance expectations of Benalla Music in relation to the expected profit or loss.
- 'Verifiability cannot be satisfied in the process of budgeting and therefore the budgeting process isn't all that valuable.' Comment on this statement.



Workbook
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EXAM-STYLE QUESTIONS

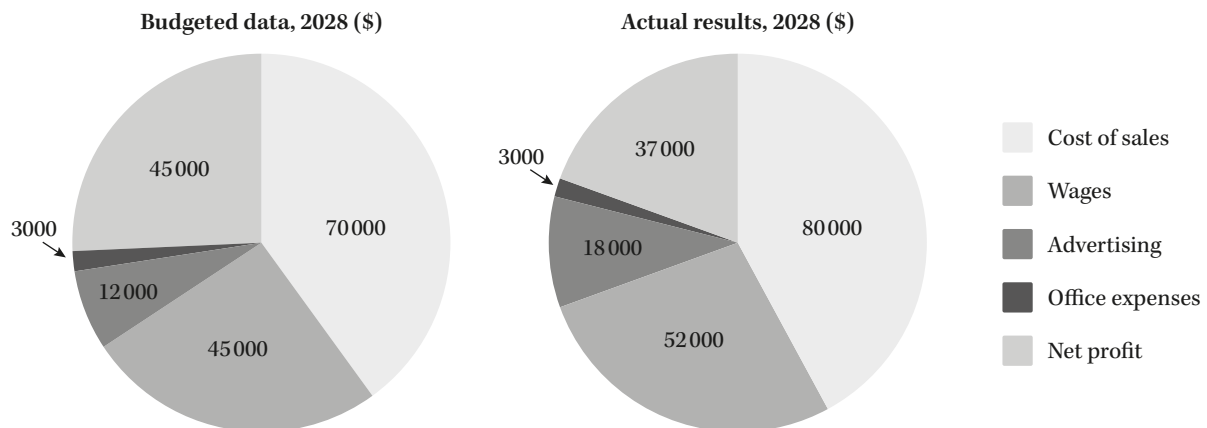
Question 1 (3 marks)

A favourable variance in sales revenue may cause some unfavourable variances in a budgeted income statement. **State and explain** three items that could have unfavourable variances as a result of a favourable variance in sales.

Question 2 (4 marks)

The owner of an auto spare parts business was pleased to note that budgeted sales for the year were \$175 000 but the business managed to achieve total sales of \$190 000 for the period. However, the owner is concerned, as budgeted profit was \$45 000, yet the actual net profit achieved was only \$37 000.

Consider the following pie charts.



Identify the main unfavourable variances and explain to the owner why the budgeted net profit result wasn't achieved.

Question 3 (3 marks)

Consider the following extract from a variance report prepared in relation to a cash flow budget.

Item	Budget	Actual	Variance	F/U
Cash sales	130 000	132 000		
Collections – accounts receivable	64 000	61 000		
Wages	34 000	36 500		
Advertising	4 500	4 300		
Purchase of vehicle	34 000	37 000		
Loan from bank	25 000	22 000		

Complete the table by filling in the last two columns with the relevant details.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 22

15 16 17 18 19 20 21 22 23

Evaluation of business performance

In this chapter, you will learn about key financial indicators for a business, and how managers use accounting reports based on these indicators to inform their decisions.

KEY TERMS

Analysis
Interpretation
Vertical analysis
Gross profit margin
Common size statements
Horizontal analysis
Trend analysis
Analytical ratio
Profitability
Expense ratio
Net profit margin
Benchmarks
Return on assets
Return on owner's investment
Asset turnover

Learning objectives

By the end of this chapter, you will be able to:

- **distinguish** between vertical analysis and horizontal analysis [22.1]
- **explain** the role of financial indicators, including ratios [22.2]
- **give** examples of benchmarks that can be used to measure performance [22.2]
- **comment** on the results of ratio analysis [22.2]
- **prepare** a variety of indicators to examine the areas of profitability and operating efficiency [22.3, 22.4]
- **calculate** changes in performance in both dollar and percentage terms [22.3, 22.4]
- **evaluate** the performance of a business using data from several reporting periods [22.3, 22.4]

PRIOR KNOWLEDGE

CHAPTER 11: Income statements

CHAPTER 14: Cash flow statements

CHAPTER 20: Budgeting



Estimated time required: 1 week



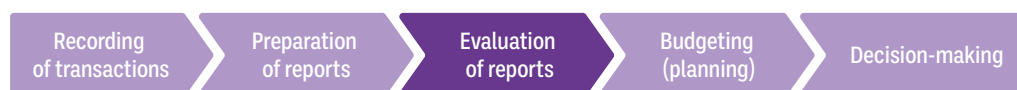


22.1 The role of financial evaluation

The evaluation of reports is a vital part of the accounting process. As managers use financial information to help them make better decisions, they must interpret the information correctly. If they don't analyse accounting reports correctly, any decisions they base on that analysis could affect the future of their business.

Planning for the future operations of a business usually takes into account the reporting of its past results. It is important, therefore, that information is reported clearly, so that management can easily interpret the results and make the right decisions. Figure 22.1 shows where evaluation fits in the overall accounting process.

Figure 22.1 The place of evaluation in the accounting system



Evaluation provides information additional to that already available in financial statements such as the income statement and the balance sheet. The techniques of evaluation should improve the quality of the information available to management. These techniques and tools include year-to-year comparisons, percentages, dollar values, ratios, charts and graphs.

Evaluation of reports involves two distinct processes:

- **analysis:** breaking down something complex into simpler, smaller parts
- **interpretation:** explaining the meaning of the completed analysis.

analysis the process of breaking down something complex into simpler, smaller parts

interpretation the process of explaining the meaning of a financial item or analytical ratio

vertical analysis the breakdown of an accounting report into percentages in a vertical fashion on the page

Vertical analysis

A simple form of analysis is to present the income statement in both dollar terms and percentages. This is known as **vertical analysis**, because the accounting report is analysed in a vertical fashion.

The income statement based on dollar values provides limited information. When the same report is analysed (or broken down) into percentages, additional information becomes available.

Figure 22.2 is an example of a vertical analysis. It shows the 2028 performance of Trendy Tees, a business that sells T-shirts with designs showing popular personalities and performers.

Figure 22.2 Vertical analysis of an income statement

	\$	%
Sales	80 000	100.00
Less: Cost of goods sold	40 000	50.00
Gross profit	40 000	50.00
Less: Other expenses		
Wages	15 000	18.75
Office expenses	5 000	6.25
Advertising	6 000	7.50
Interest	4 000	5.00
Total expenses	30 000	37.50
Net profit	10 000	12.50

Sales is always stated as 100% and then all other items in the income statement are expressed as a percentage of sales.

The final figure in this report indicates that this business earned 12.5 cents of profit out of every \$1 of sales.

Management can now interpret this report in terms of the percentage of the sales dollar consumed by each expense. The percentage of the sales dollar earned as both gross profit and net profit is also available. This information wasn't readily available in the normal statement.

The vertical analysis in Figure 22.2 shows that, on average, 50% of the sales dollar earned by Trendy Tees was consumed by its cost of sales. (This is an average only, as the business may vary its mark-up on the different T-shirts it sells.) Over the year, half of its sales revenue was consumed by cost prices, thus leaving 50% of the sales dollar as gross profit.

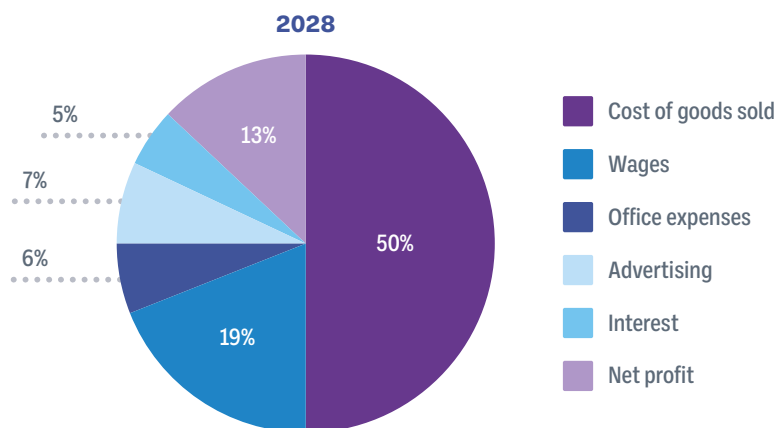
Note that an increase in the business's mark-up would increase its **gross profit margin** (gross profit/sales). On the other hand, if cost prices increased and selling prices remained unchanged, the gross profit margin would fall.

Having established a gross profit percentage, it can also be seen that:

- wages consumed 18.75% of the sales dollar
- 6.25% went in office expenses
- advertising used up 7.5% of sales
- interest expense consumed 5% of the sales dollar.

The end result is that 12.5% of total sales remained as net profit at the end of the period (net profit/sales). This type of data is often represented in pie chart form, which is a useful way to demonstrate changes that may occur from one period to the next.

Figure 22.3 shows a pie chart for the above income statement.



gross profit margin

the percentage of the sales dollar remaining after cost of goods sold has been taken into account

Figure 22.3 Pie chart showing breakdown of sales dollar

Vertical analysis allows statements to be presented as percentages for each reporting period. Translating accounting reports from dollars to percentages provides a common base, which allows comparisons to be made more easily. **Common size statements** are reports based on percentages, rather than actual dollar amounts, to assist comparison of results.

common size statements reports that use percentages, rather than dollar values, to allow easier comparison of results



Horizontal analysis

horizontal analysis

the comparison of financial results across the page, usually by reporting on several consecutive trading periods

A second form of analysis uses horizontal comparisons of multiple trading periods. Continuing with the example of Trendy Tees, a **horizontal analysis** can be performed as shown in Figure 22.4.

Figure 22.4 Horizontal analysis of the income statement



	2026		2027		2028	
	\$	%	\$	%	\$	%
Sales	60 000	100.00	80 000	100.00	80 000	100.00
Less: Cost of goods sold	33 000	55.00	45 000	56.25	40 000	50.00
Gross profit	27 000	45.00	35 000	43.75	40 000	50.00
Less: Wages	10 000	16.67	14 000	17.50	15 000	18.75
Office expenses	4 000	6.67	5 000	6.25	5 000	6.25
Advertising	5 000	8.33	6 000	7.50	6 000	7.50
Interest	1 000	1.67	2 000	2.50	4 000	5.00
Total expenses	20 000	33.33	27 000	33.75	30 000	37.50
Net profit	7 000	11.67	8 000	10.00	10 000	12.50

Horizontal analysis allows a comparison of data across several consecutive reporting periods.

As all three reports express each item as a percentage of sales, they can now be compared horizontally across the page. For example, although Trendy Tees' net profit increased from \$7000 to \$8000, and then from \$8000 to \$10 000, it hasn't remained a constant percentage of sales:

- 2026: net profit as a percentage of sales was 11.67%
- 2027: net profit as a percentage of sales was only 10%
- 2028: net profit as a percentage of sales increased to 12.5%.

Vertical analysis can then be used to explain why certain changes have occurred over time. For example, it looks like the 2027 fall in the net profit percentage was caused by the fall in the gross profit rate.

Note that the percentage consumed by expenses was virtually constant in 2026 and 2027. However, a problem may be developing, as the total consumed by expenses jumped from 33.75% in 2027 to 37.5% in 2028.

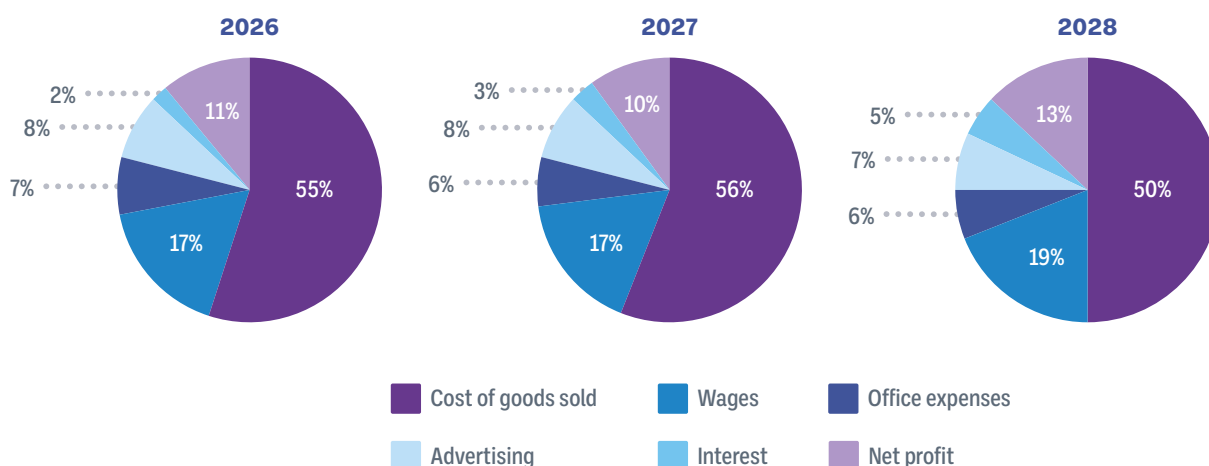
Management can use such analysis to pinpoint problems and make decisions to correct the situation. For example, two expenses (wages and interest) have increased as a percentage of sales each year. These two areas may need to be reviewed and monitored carefully in the future to ensure they don't reduce future profits.

The use of pie charts can also support horizontal analysis, as they allow for easy comparisons over consecutive periods. The Trendy Tees horizontal analysis can be presented as shown in Figure 22.5.

Pie charts provide an instant overview of major changes within a business. The most obvious change shown in Figure 22.5 occurred with cost of goods sold, which dropped from 56.25% in 2027 to only 50% in 2028. Net profit increased slightly over the same period.

Some users of accounting reports prefer pie charts to pages of numerical data, because of their visual impact. As long as the information they present is accurate, pie charts can be a valuable tool for accountants.

Figure 22.5 Comparative pie charts over consecutive reporting periods



Combined analysis

Management can use a combination of vertical and horizontal analysis to examine a business's performance over several reporting periods. They can then identify changes in revenues and expenses over time and take appropriate action.

It's essential to use comparative data *over time*, as one year's data may not present the full picture. Vertical analysis can provide detailed information about the current reporting period, but when this is compared with previous periods, it may be seen differently.

Consider the following example, which compares the performance of two different businesses.

	2028	
	Business A	Business B
	\$	\$
Sales	50 000	50 000
Net profit	10 000	10 000

The above figures simply state that the sales and profit figures for both businesses were the same in 2028. Both businesses earned a profit that was 20% of sales revenue ($10/50 = 0.20$).

However, vertical analysis is limited, as it only considers the one period. If previous years' figures are also available, it might lead to a different opinion of the performances of the two businesses.

The following shows a three-year comparison.

	Business A			Business B		
	2026	2027	2028	2026	2027	2028
	\$	\$	\$	\$	\$	\$
Sales	30 000	40 000	50 000	70 000	60 000	50 000
Net profit	3 000	6 000	10 000	25 000	20 000	10 000

When the results of the three years are compared, Business A appears to have performed much better in 2028 than Business B.

This horizontal analysis can be used to produce data that allows comparisons of one year against another. For example, the given data tells us the following:

- During 2028, Business A increased sales revenue by 25% (an increase of \$10 000 on the \$40 000 earned in 2027).
- Business A's profit in 2028 was $\$10\,000 - \$6\,000 = \$4\,000$, or 66.7% ($\$4\,000/\$6\,000$) above that achieved in 2027.
- In contrast to the results achieved by Business A, Business B experienced a drop in sales of $\$60\,000 - \$50\,000 = \$10\,000$, or 16.7% ($\$10\,000/\$60\,000$), as well as a 50% decrease in profit.

Comparing one year's data to that of one or more previous years provides management with a trend of the business's performance. **Trend analysis** involves measuring the change in an item from one year to another. For example, 2028 may be compared with 2027, or with 2026; we may even look at the trend over five or ten years.

trend analysis measuring the change in a financial item or an indicator over several periods



22.2 Analytical ratios

When final accounting reports have been prepared, they offer a wide range of financial information to users. However, accountants will often extract and compare different pieces of information to find out more about the business. This process creates an analytical ratio.

An **analytical ratio** is the mathematical comparison of two items that have a particular relationship. For example, a comparison of current assets and current liabilities measures the liquidity of a business. Profit for a period can be compared with the investment made in the business to measure its **profitability**.

Analytical ratios are also known as *financial indicators*, as management uses them to measure financial performance over different periods. This is possible because these indicators bring all figures back to a common base.

For example, sales in one period may be \$123 460 but may increase to \$125 870 in the following period. Such odd amounts make comparisons difficult. However, if sales for both periods are made to equal 100%, comparisons are possible, and expenses can all be expressed as a percentage of sales revenue.

The previous examples of income statements showed how the results of several periods can be compared and trends detected in particular areas within the business. The vertical analysis in Figure 22.2 (page) is based on a collection of financial indicators. Some examples contained in Figure 22.2 are:

- gross profit margin, which is gross profit divided by net sales
- **expense ratios** – for example, wages divided by net sales
- **net profit margin**, which is net profit divided by net sales.

These financial indicators are only one type of ratio, as they all relate to the income statement and the profitability of the business.

Financial indicators are an important part of evaluation because they make it possible to compare data from different periods.

analytical ratio a comparison of two related items in order to analyse an aspect of business performance

profitability a comparison of the profit with a base figure, such as assets employed, capital invested or sales made

expense ratio (**expense/sales**) may also be used for total expenses (total expenses/sales)

net profit margin (**net profit/sales**) the percentage of the sales dollar that remains after all expenses have been taken into account

Financial indicators and benchmarks

When financial indicators are calculated, they are usually compared to **benchmarks** of measurement or performance. These are used to measure the success (or otherwise) of business decision-making.

Typical benchmarks include comparisons with the following:

- *Previous periods' results.* These allow a trend in an indicator to be detected.
- *Industry averages, or comparisons with other similar businesses.* Although such information isn't always publicly available, an accountant may be able to state if a business's performance is above or below that of similar businesses.
- *Budget estimates or predicted results.* Even if financial indicators reflect an improved performance (compared to previous periods), they may not have achieved the level of performance set by management's targets.
- *Alternative investments.* Indicators that are used to examine profitability should be compared against the rates of return available on other forms of investment. There may be little value in investing in a business if a greater return is available in the money market.

Whenever an indicator is calculated, it should be compared with one or more benchmarks to give it some sort of meaning. The benchmarks used will vary depending on the particular indicator.

As long as financial indicators are calculated in a consistent manner, they can provide management with detailed information about the performance of the business in a number of areas.

Main types of financial indicators

There are literally hundreds of financial indicators that can be calculated to measure different aspects of a business's performance. This text will only cover the most important indicators that relate to the sole trader type of business.

While it's important to appreciate that indicators interrelate with one another, they can be grouped into four main areas:

- 1 **Profitability indicators.** These examine how profitable the business has been during the period. Profitability may be measured by comparing profit with an investment, by looking at what happened to the sales dollar during a period (see Figure 22.3, page 427), or by other means.
- 2 **Operating efficiency indicators.** These look at how efficiently management uses the assets available to them. Investment in inventory, accounts receivable, current assets or non-current assets can all be examined in terms of how efficiently they have been used and managed.
- 3 **Liquidity indicators.** These investigate the ability of the business to meet its short-term debts as they fall due. Liquidity indicators are usually based on short-term events and consider items relevant to the next 12 months of a business's operations.
- 4 **Stability indicators.** These measure a business's financial stability and reflect the financial risk the business owners are taking.

benchmarks tools used to measure performance by comparing financial results against some established criteria

Note

You won't be asked to calculate financial indicators in the VCE exam, but you must be able to explain what each indicator measures, and whether it has improved or deteriorated.

These four types of financial indicators are explained in this and the next chapter.

Remember that one indicator may have a direct impact on another indicator in a different area:

- An indicator that shows how efficiently assets have been used may affect one or more profitability indicators.
- Liquidity indicators take into consideration a business's current liabilities. As these may involve loans, and loans attract interest, this may also have an impact on profitability.

Keep in mind the possible relationships between indicators as you study this topic.



22.3 Profitability indicators

Before we look at individual profitability indicators, it's important to distinguish between the terms 'profit' and 'profitability'.

- *Profit* is simply the dollar value determined when expenses incurred are deducted from revenue earned over a given period.
- *Profitability* is the comparison of a profit figure with a base figure, such as the investment made by an owner.

When attempting to measure a business's profitability, it's necessary to do more than determine a net profit for a period. Profitability indicators not only examine how profitable a business has been, but also look at the reasons for changes in its profitability.

We will now examine the most important profitability indicators in detail.

Gross profit margin

$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Net sales}} \times 100$$

One of the most important factors that influence the profit of a trading business is the percentage of the sales dollar earned as gross profit. The relationship between the cost price and the selling price of the goods sold by the business is crucial to profitability.

If cost prices increase over time, but selling prices remain constant, the gross profit margin will fall. If management decides to increase the general mark-up on the inventory sold, the gross profit margin will increase.

The following data demonstrates the gross profit margin for Trendy Tees.

	2027 \$	2028 \$
Net sales	80 000	100 000
Less: Cost of goods sold	40 000	55 000
Gross profit	40 000	45 000
Gross profit margin	\$40 000	\$45 000
	\$80 000	\$100 000
	= 0.50:1	= 0.45:1
	or 50.0%	or 45.0%

The gross profit margin for this business dropped from 50% in 2027 to 45% in 2028. This indicator tells management that, although sales increased by \$20 000 over the year, the percentage of the sales dollar maintained as gross profit decreased.

This change occurred because, on average, cost of goods sold consumed 55 cents out of each sales dollar in 2028 (up from 50 cents in 2027). The reason for this may have been:

- cost prices increased, while selling prices remained constant
- cost prices remained constant, while selling prices were decreased
- both cost prices and selling prices increased, but cost prices increased at a greater rate.

When evaluating a gross profit margin, it's important to compare it against benchmarks such as the previous periods' gross profit margins and the budgeted gross profit rate.

Net profit margin

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Net sales}} \times 100$$

A business's net profit margin is the relationship between its total revenues and total expenses. Once the gross profit rate has been calculated, the level of the business's operating expenses determines the percentage of the sales dollar that remains as the net profit for the period.

The following shows data relating to Trendy Tees' operating expenses.

	2027 \$	2028 \$
Net sales	80 000	100 000
Less: Cost of goods sold	40 000	55 000
Gross profit	40 000	45 000
Less: Wages	10 000	15 000
Office expenses	5 000	5 000
Total expenses	15 000	20 000
Net profit	25 000	25 000
Net profit margin	\$25 000	\$25 000
	\$80 000	\$100 000
	= 0.31:1	= 0.25:1
	or 31.0%	or 25.0%

An obvious question in relation to Trendy Tees is: *Why did the business's profit remain at the level of \$25 000 when sales increased by \$20 000?*

The net profit margin indicates that in 2027 about 31 cents in the dollar was earned as profit, and that this figure has dropped to 25 cents in the dollar in 2028. This return on sales should be compared with the rate achieved in past periods, the budgeted rate, and the rate achieved by similar businesses. Although each business is unique in terms of its own revenues and expenses, if similar businesses earn a much higher net profit margin, this may be a warning signal that something is wrong.

Having determined this result, the question then becomes: *How did it occur?*

One possible cause is the 5% drop in the gross profit margin, which flowed on to affect the net profit margin. Another possible cause is the change in expenses.

Expense ratios

$$\text{Expense ratio} = \frac{\text{Expense item}}{\text{Net sales}} \times 100$$

A percentage rate can be calculated for each individual expense item. Such expense ratios inform management about the percentage of the sales dollar consumed by each expense.

For Trendy Tees, two calculations can be made, as shown.

	2027 \$	2028 \$
Wages expense ratio	10 000	15 000
	80 000	100 000
	= 0.125:1	= 0.150:1
	or 12.5%	or 15.0%
Office expenses ratio	\$5 000	\$5 000
	\$80 000	\$100 000
	= 0.0625:1	= 0.05:1
	or 6.250%	or 5.00%

These two expense ratios aren't usually presented in examinations, but it's important to understand how such expenses impact on the net profit margin.

These two expense ratios show contrasts in their trends.

The wages of the business consumed 12.5 cents of each sales dollar in 2027, and this increased to 15 cents in 2028. This may be expected to occur because sales increased by \$20 000 over this time. However, the increase in selling expenses occurred at a greater rate than the increase in sales (50%, compared with 25%). Thus, in 2028 the business's profitability was reduced by the large increase in wages expenses.

The office expenses ratio shows a drop from 6.25% to 5% over the two years. In this case, the expense in dollar terms didn't change. As sales increased in 2028, office expenses as a percentage of sales actually decreased. This could be because the expenses incurred in running the office may be constant in nature. Items such as postage, telephone and stationery may not vary much from one year to the next.

Expense ratios should be compared with previous periods' results and the expense budgets set down by management. Always investigate unexpected expense items and major changes in expense ratios, as they have a direct impact on the business's net profit margin.

Business owners will often know the mark-up on their inventory, but they also need to keep control over the expenses their business incurs.

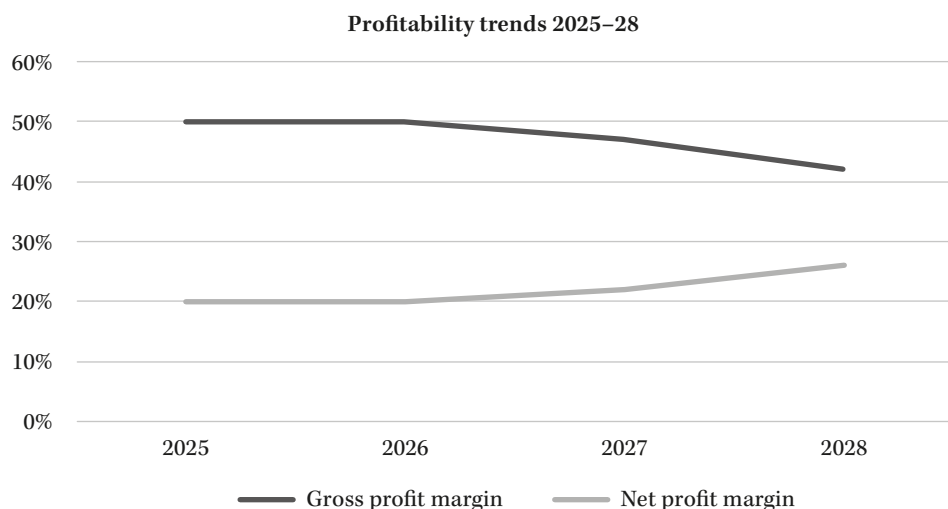


EXAM-STYLE QUESTION

The following graph relates to the business of Pics and Posters.

The owner has asked for your help in interpreting what it shows.

(4 marks)



- a** Describe the trend in the gross profit margin. Suggest circumstances that could explain the changes shown in the line for the GP margin.
- b** Explain the changes in the net profit margin, given that the gross profit margin has changed significantly over the last couple of years.

Sample answer

- a** The gross profit (GP) margin was consistent in 2025 and 2026, indicating that a steady mark-up was maintained over these two years. However, in the next two years the GP margin decreased. This could have been caused by an increase in cost prices, without a corresponding increase in selling prices. Alternatively, cost prices may have remained constant and management may have deliberately dropped their selling prices in an attempt to boost sales.
- b** Given that the GP margin has decreased significantly, the only way for the net profit (NP) margin to increase is to decrease the expenses as a percentage of the sales dollar. The decrease in the GP margin would usually flow through to a lower NP margin. However, if management achieves greater control over the expenses of the business, it is still possible to increase the NP margin over time.

Exam advice

Most recent exams have included at least one question with a graphical representation of financial data. When presented with a graph, examine it carefully before you start to write your response. Some graphs may look a little unusual at first glance. In the above example, some students may not realise that the situation presented is quite possible. If you have a thorough knowledge of the financial indicators, you should be able to come up with a satisfactory answer. Think it through carefully before you start writing!

Don't mix up terms such as 'gross profit' and 'gross profit margin'. Gross profit is a dollar amount, while gross profit margin is a financial indicator. In responding to the above question, some students would state that gross profit has decreased and net profit has increased. This is impossible to say, as there is no data provided in relation to gross or net profit. Such a response indicates a lack of knowledge and won't achieve full marks. In your written response, always be very specific about what you are describing.

Return on assets

$$\text{Return on assets} = \frac{\text{Net profit}}{\text{Average total assets}} \times 100$$

The financial indicators demonstrated so far examined relationships that exist within the income statement. Another way of measuring the profitability of a business is to compare the net profit for the period with the amount invested in the business's assets.

Rather than using the value of total assets at the beginning or end of the period, an average of these two values is normally used. This removes any bias that may exist if total assets change in a significant manner right near the end of the period. By using an average of asset value, the profit can be compared with the average level of investment. If the data is available, an average based on monthly figures would be even more accurate.

Once the method of calculating the rate of return has been decided, it should be applied consistently each reporting period (as required by the qualitative characteristic of *comparability*). If this isn't done, meaningful comparisons become more difficult, as changes in the ratio may occur simply because of a change in the method of calculation.

The following information is used to calculate Trendy Tees' **return on assets**.

	2026 \$	2027 \$	2028 \$
Total assets	120 000	130 000	140 000
Net profit		25 000	25 000

For 2027:

$$\begin{aligned}\text{Return on assets} &= \frac{\text{Net profit}}{\text{Average total assets}} \\ &= \frac{\$25\,000}{(\$120\,000 + \$130\,000) \div 2} = \frac{\$25\,000}{\$125\,000} = 0.2 \text{ or } 20\% \text{ return}\end{aligned}$$

For 2028:

$$\text{Return on assets} = \frac{\$25\,000}{(\$130\,000 + \$140\,000) \div 2} = \frac{\$25\,000}{\$135\,000} = 0.185 \text{ or } 18.5\% \text{ return}$$

The results of the return on assets can be interpreted in two different ways.

It can be expressed in terms of the profit earned for every dollar invested in the business's assets. In the above example, in 2027 Trendy Tees earned 20 cents of profit for every dollar it invested in assets. In 2028, an unfavourable trend occurred when the return on assets dropped to only 18.5 cents of profit for every dollar invested.

It can be expressed in terms of the **return on owner's investment**. In 2027, Trendy Tees earned a return of 20% per annum on its investment, but only 18.5% in 2028. The return on assets is often expressed in these terms, as owners use this as a comparison with alternative investments. This is one of the benchmarks that can be used to evaluate a rate of return.

The other usual benchmarks are still valid for this financial indicator since the results can be compared with previous years, budget expectations, and returns achieved by similar businesses.

return on assets how well management has used its investment in assets to earn profit

return on owner's investment the return earned on the investment of funds by the proprietor of a business

Return on owner's investment

$$\text{Return on investment} = \frac{\text{Net profit}}{\text{Average capital}} \times 100$$

A percentage return may also be calculated on the actual investment made by the owner of the business.

An owner will usually be interested in the return being earned on the capital they invested in their business. As many small businesses fund some of their assets through liabilities, there may be a significant difference between total assets and owner's equity.

The following details expand the Trendy Tees example.

	2026 \$	2027 \$	2028 \$
Capital	70 000	80 000	90 000
Total assets	120 000	130 000	140 000
Net profit		25 000	25 000

For 2027:

$$\begin{aligned}\text{Return on owner's investment} &= \frac{\text{Net profit}}{\text{Average capital}} \\ &= \frac{\$25\,000}{(\$70\,000 + 80\,000) \div 2} = \frac{\$25\,000}{\$75\,000} \\ &= 0.33 \text{ or } 33\% \text{ return}\end{aligned}$$

For 2028:

$$\begin{aligned}\text{Return on owner's investment} &= \frac{\$25\,000}{(\$80\,000 + 90\,000) \div 2} = \frac{\$25\,000}{\$85\,000} \\ &= 0.294 \text{ or } 29.4\% \text{ return}\end{aligned}$$

The return on owner's investment fell from 33% in 2027 to 29% in 2028. This is an unfavourable trend, as the owner's capital has earned a lower return on the average level of investment.

As with the return on assets, an average of the owner's capital is the preferred figure to be used in this financial indicator. However, capital at the beginning or end of the year may be used as alternatives. The important thing is always to calculate the ratio using the same method consistently from one year to the next.

When evaluating an owner's personal return on investment, the usual benchmarks include comparisons with:

- alternative investments in the money market
 - the budgeted, or expected, rate of return
 - previous periods' rates of return.
- 1 When evaluating the return on an owner's investment, remember that the desired return may be based on a personal target. Many owners seek a return much higher than that available in the commercial market, as a reward for their hours of work and the financial risk undertaken by starting a small business.
 - 2 Another factor to consider is that an owner's return on investment doesn't always equal the amount available for drawings. The return earned on alternative investments may be paid in cash each year, but this isn't always possible when running a business. Funds may have to be retained to finance the future plans of the business. For these reasons, an owner may want a much higher return on investment compared with many other types of investments.



22.4 Operating efficiency indicators

A trading business purchases assets for the purpose of generating revenue. Money is invested in assets such as fittings, delivery vehicles and inventory to help the business earn a profit. If a business uses its assets to their maximum operating efficiency, the result should be maximum profit.

The financial indicators in this section illustrate how efficiently a business uses its various types of assets. However, always remember that efficiency indicators have a direct impact on the profitability ratios covered earlier, as assets are used to generate revenue, which ultimately determines the level of profit earned for the period.

Asset turnover

asset turnover a measure of how well assets have been used to generate sales

$$\text{Asset turnover} = \frac{\text{Net sales}}{\text{Average total assets}}$$

Asset turnover compares sales revenue with the average investment in the business's total assets. It tells management how many times the investment in assets has been turned into sales revenue.

The asset turnover for Trendy Tees is calculated as follows:

	2026 \$	2027 \$	2028 \$
Sales		80 000	100 000
Total assets	120 000	130 000	140 000

For 2027:

$$\begin{aligned}\text{Asset turnover} &= \frac{\text{Net sales}}{\text{Average total assets}} \times 100 \\ &= \frac{\$80\,000}{(\$120\,000 + \$130\,000) \div 2} = \frac{\$80\,000}{\$125\,000} = 0.64 \text{ times}\end{aligned}$$

For 2028:

$$\text{Asset turnover} = \frac{\$100\,000}{(\$130\,000 + \$140\,000) \div 2} = \frac{\$100\,000}{\$135\,000} = 0.74 \text{ times}$$

This trend is a favourable result, because the dollars invested in Trendy Tees' assets have generated a higher rate of sales turnover. The more times the investment in assets is turned into sales, the better it is for the business because this reflects a more efficient use of the assets available to management.

Another way of looking at this ratio is that, for every dollar invested in assets, 64 cents of sales revenue was generated in 2027, which increased to 74 cents for every dollar invested in 2028. Alternatively, the dollars invested in assets generated a 64% return in terms of sales, and this increased to 74% in 2028.

If the asset turnover rate falls, it indicates that revenue is being generated at a slower rate. If the result is a higher number, it indicates that assets are generating revenue at a faster rate. When discussing this financial indicator in exam questions, you should describe the change as being either faster or slower. Therefore, assets that are idle for extended periods of time will cause the turnover rate to be slower in terms of generating revenue. Highly productive assets will help to increase this indicator, as revenue will be generated at a faster rate.

Classified asset turnover

Asset turnover rates may also be calculated for specific classifications of assets. That is, a turnover rate may be calculated for current assets or non-current assets:

$$\begin{aligned}\text{Current asset turnover rate} &= \frac{\text{Net sales}}{\text{Average current sales}} \\ \text{Non-current asset turnover rate} &= \frac{\text{Net sales}}{\text{Average non-current assets}}\end{aligned}$$

Although it's handy to understand how these indicators affect the asset turnover rate, these two indicators are not usually featured in examinations.

Asset turnover rates may be calculated on a classification basis to reveal problem areas within the business.

If the overall asset turnover decreases each year, management may need further information to locate the problem. For example, perhaps non-current assets have maintained the same relationship with sales revenue for several periods, while the current asset turnover rate shows a steady decrease. This identifies the problem area, and management is then in a better position to correct it.

All turnover rates should be compared with some established benchmarks. The usual ones used include previous periods' figures, budget estimates and, if appropriate, similar businesses or industry averages.

The last of these benchmarks isn't always suitable for these indicators, as the asset structure of businesses can vary greatly. If comparisons with other businesses are to be made, management must first ensure that those comparisons are valid. Otherwise, they should use internal benchmarks, such as the previous year's results and the budgeted rates.

Other analysis tools

When analysing the operating efficiency of a business, the asset turnover rate provides a general guide as to how well management has used its assets during a reporting period. However, this rate is general in nature and takes into account all the assets under the control of the entity.

More specific detail can be provided about the business's assets by using several tools of analysis that were covered in Chapter 14. These include:

- inventory turnover
- accounts receivable turnover
- age analysis of accounts receivable
- cash cycle
- accounts payable turnover.

Since these items have already been explained, we won't cover them again here in detail. However, a brief summary will help you to keep them in mind as part of an overall analysis of a business's performance.



Inventory turnover

Reminder: Always use *faster* or *slower* when describing changes in this indicator.

$$\text{Inventory turnover} = \frac{\text{Average inventory} \times 365}{\text{Costs of goods sold}}$$

This indicator determines the number of days a business takes to turn the average level of inventory into sales. Inventory turnover is used to evaluate performance in managing and controlling inventory.

When interpreting inventory turnover rates, consider:

- the type of inventory being sold
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives.

Accounts receivable turnover

Reminder: Always use *faster* or *slower* when describing changes in this indicator.

$$\text{Accounts receivable turnover} = \frac{\text{Average accounts receivable} \times 365}{\text{Net credit sales} + \text{GST}}$$

The accounts receivable turnover examines the performance of management in collecting its debts from credit customers. It is expressed in days and is used to assess the average time accounts receivable take to settle their accounts. The accounts receivable turnover can be used to evaluate performance in relation to controlling and managing credit accounts.

When interpreting accounts receivable turnover results, the usual benchmarks include:

- the credit terms originally offered to accounts receivable
- accounts receivable age analysis (see below)
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives.

Age analysis of accounts receivable

This tool is another method for analysing the performance of management in relation to accounts receivable. An age analysis can be prepared on a regular basis to provide a breakdown of accounts receivable in relation to the age of their debts. It can provide a business owner with regular feedback on the success or otherwise of their collection procedures.

The results can also be measured by:

- the credit terms originally offered to accounts receivable
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives.

Cash cycle

Reminder: Always use *faster* or *slower* when describing changes in this indicator.

$$\text{Cash cycle} = \text{Inventory turnover} + \text{Accounts receivable turnover}$$

The addition of the two turnover rates provides management with an assessment of the time taken to turn inventory into sales, and then sales into cash.

For a trading business, the cash cycle is crucial. The cycle of buying inventory, selling it, and then collecting cash from its sales is the reason trading businesses exist. Ultimately, it's the process that determines the success or failure of so many Australian small businesses. If management can't complete the cash cycle within a certain time, the business is doomed to fail.

When evaluating the cash cycle, consider the following:

- the performance of the individual turnover rates
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives
- accounts payable turnover rate.

Accounts payable turnover

$$\text{Accounts payable turnover} = \frac{\text{Average accounts payable} \times 365}{\text{Net credit purchases} + \text{GST}}$$

Reminder: Always use *faster* or *slower* when describing changes in this indicator.

This indicator is used to evaluate the management of accounts payable. It is expressed in days, with the result being the average time taken to settle accounts with suppliers.

This indicator should be compared to the accounts receivable turnover and/or the cash cycle of the firm. A small business must be able to manage its cash by finding a balance between the time taken to complete its cash cycle and the time taken to settle accounts payable. At times, management may have to extend the accounts payable turnover rate simply because it's unable to complete the cash cycle at a fast enough rate.

Things to consider when interpreting results of the accounts payable turnover include:

- cash cycle results
- credit terms offered by suppliers
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives.

Efficiency ratios and profitability

The way management uses a business's assets has a direct impact on its profitability.

Two key ratios already examined are asset turnover and the net profit margin.

$$\text{Asset turnover} = \frac{\text{Net sales}}{\text{Average total assets}}$$

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Net sales}}$$

The return on assets measures how efficiently the assets of a business have been used to generate profit. If the two ratios stated above are multiplied together, the result is the return on assets calculation:

$$\text{Return on assets} = \frac{\text{Net sales}}{\text{Total assets}} \times \frac{\text{Net profit}}{\text{Net sales}} = \frac{\text{Net profit}}{\text{Total assets}}$$

As the sales figure for the period appears in both financial indicators, when they are multiplied together the sales figure is cancelled out. The return on assets calculation remains as net profit divided by total assets.

Using the data from Trendy Tees, the ratios are calculated as follows:

	2027	2028
Net profit margin	\$25 000	\$25 000
	\$80 000	\$100 000
	= 31.25%	= 25.0%
Asset turnover	\$80 000	\$100 000
	\$125 000	\$135 000
	0.64 times	0.74 times
Return on assets	\$25 000	\$25 000
	\$125 000	\$135 000
	= 20.0%	= 18.52%

These two financial indicators ultimately determine the rate of return earned on the firm's total assets.

The net profit margin decreased from 2027 to 2028, while asset turnover increased over the same period.

The return on assets showed a slight decrease over the year. This decrease was the result of the changes in the other two ratios.

	Net profit margin	Asset turnover
2027: Return on assets	= 31.25%	× 0.64 times = 20.0%
2028: Return on assets	= 25.00%	× 0.74 times = 18.5%

Because the return on assets is actually affected by two other ratios, management can dissect it to determine the full picture of events.

When the return on assets was calculated, it stated that a decrease occurred from 2027 to 2028. However, it's now known that asset turnover actually increased during this period. The problem for Trendy Tees is that expenses consumed so much of the sales dollar during 2028 that they eliminated the benefits achieved through the higher asset turnover.

In summary, the return on assets actually reports on two aspects of a business's performance:

- It examines how efficiently the business has used its assets to generate revenue (i.e. asset turnover).
- The return is affected by the percentage of the sales revenue consumed by the business's expenses, which determines the business's net profit margin.

The return on assets provides clear evidence that operating efficiency ratios have a direct impact on a business's profitability.

Keep in mind that efficiency ratios might also have an impact on other areas of a business. The liquidity of a business is one such area, and we will examine this in the next chapter.



Practise and apply

22



REVISION: SUMMARY OF KEY CONTENT

- [22.1]** Two common, simple forms of accounting analysis are vertical analysis (presenting the income statement in both dollar terms and percentages) and horizontal analysis (comparing reports on several consecutive trading periods).
- [22.2]** Management uses financial indicators to measure financial performance over different periods. When financial indicators are calculated, they are usually compared to benchmarks of measurement or performance.
- [22.2]** An analytical ratio is an indicator that is the mathematical comparison of two related items, such as current assets and current liabilities. Many different types of ratios can be calculated and analysed.
- [22.3]** Profitability indicators examine how profitable the business has been during the period. Profitability may be measured by comparing profit with an investment, by looking at what happened to the sales dollar during a period, or by other means.
- [22.4]** Operating efficiency indicators look at how efficiently management uses the assets available to them. Investment in inventory, accounts receivable, current assets or non-current assets can all be examined in terms of how efficiently they have been used and managed.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



Workbook
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XL template

1 Analysis by common size statements

The owner of Brebner's Boutique supplied the following financial information.

	2027	2028
	\$	\$
Sales	136 000	149 600
Cost of goods sold	61 200	71 800
Wages	20 400	22 440
Office expenses	6 800	11 970

- Using a spreadsheet, prepare income statements for the two years in both dollar and percentage terms.
- Briefly explain the change in the gross profit margin from 2027 to 2028.
- Prepare a pie chart for each of the two years, showing the percentage breakdown of the sales dollars into expenses and net profit.
- Explain what has happened to the net profit margin of the business over the two years. Use data from your other answers to help explain the changes in the profitability of the business.



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XL template

2 Gross profit margin

The following information relates to the business of Currenti's Computers, a small business owned and managed by Marcus Currenti.

	2027	2028
	\$	\$
Sales	120 000	150 000
Cost of goods sold	66 000	89 100

- Calculate the gross profit margin for 2027 and 2028.
- Determine the percentage increase in both sales and cost of goods sold from 2027 to 2028.
- Referring to your answers in parts **a** and **b**, explain to Currenti what has happened in his business over the last two years.

3 Analysis by common size statements

Luke Deering, the proprietor of Superior Sports, provides the following information relating to his business.

	2027	2028
	\$	\$
Sales	192 000	215 040
Cost of goods sold	92 160	97 690
Wages	24 000	26 400
Advertising	3 840	4 200

- Using a spreadsheet, prepare income statements for the two years in both dollar and percentage terms.
- Prepare a pie chart for each of the two periods to show the breakdown of the sales dollars in percentage terms.
- Write a report explaining the changes that have occurred in the business of Superior Sports from 2027 to 2028.

4 Evaluation of profitability

The information provided below relates to Commercial Telephones, a business owned and managed by Sue Dodd.

	2026	2027	2028
	\$	\$	\$
Sales	160 000	165 000	185 000
Net profit	25 600	26 400	32 000
Total assets	90 000	100 000	100 000
Owner's equity	60 000	65 000	65 000

- Calculate the following financial indicators for the years 2027 and 2028:
 - net profit margin
 - return on assets
 - return on owner's investment.
- Write a brief comment to Dodd on the performance of the business as revealed by each of the indicators calculated in part **a**.
- Describe three different benchmarks that may be used to evaluate the owner's return on her investment.
- Compare the results of the return on assets and the return on owner's investment for 2027 and 2028. Explain how this is possible.

5 Evaluation of profitability

Petra Romic earned a profit of \$46 200 in her small business after investing \$99 000 capital. Robert Bartolo made an investment of \$72 000 into his business and earned a profit of \$35 400.

- Calculate the return on owner's investment for each of the two owners.
- Which owner has the higher profitability? Explain your answer.
- If both businesses had assets of \$120 000, calculate the return on assets for each business.
- Which business has used its assets most effectively in terms of earning profit? Justify your answer.



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XL template

6 Evaluation of profitability

The following information relates to two similar businesses.

	High Street Hardware	Hardware Emporium
	\$	\$
Total assets 30/6/27	86 600	78 400
Total assets 30/6/28	83 400	85 600
Sales for the year	382 500	348 500
Net profit	45 900	48 790

- Using the above information, calculate the following financial indicators for each of the businesses:
 - asset turnover
 - return on assets
 - net profit margin.
- Which business has used its assets most effectively to earn its sales revenue? Explain your answer fully.
- Compare the results of the three ratios for the two businesses. Comment on the differences between the two sets of results.



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XL template

7 Evaluation of profitability

Consider the results of the two businesses presented below.

	Victory Vespa	Seddon Scooters
	\$	\$
Total assets 31/12/27	120 000	96 000
Total assets 31/12/28	124 000	108 000
Sales for the year	457 500	326 400
Net profit	51 240	39 160

- Calculate return on assets, net profit margin and asset turnover for each of the two businesses.
- Write a brief comment on the results revealed by each of the three ratios.
- 'If a business increases its asset turnover, its net profit margin must also increase.' Do you agree with this statement? Explain your answer fully.

Adventure Australia is a business that sells rock-climbing, abseiling and mountaineering equipment, along with related accessories and clothing.

The following accounting reports have been provided for the most recent reporting periods.



**ADVENTURE AUSTRALIA:
INCOME STATEMENTS FOR THE YEARS ENDED 31 DECEMBER**

		2027	2028
		\$	\$
Revenue			
	Credit sales	190 000	188 000
	Cash sales	66 000	70 000
		256 000	258 000
less	Sales returns	6 000	2 000
	Net sales	250 000	256 000
less	Cost of sales	122 000	132 000
	Gross profit	128 000	124 000
Less	Other expenses		
	Shop wages	22 000	26 000
	Advertising	4 000	6 000
	Depreciation of shop fittings	2 000	2 000
	Depreciation of vehicle	6 000	6 000
	Rent	48 000	48 000
	Vehicle expenses	2 000	3 000
	Interest	5 000	6 000
	Total expenses	89 000	97 000
	Net profit	39 000	27 000

**ADVENTURE AUSTRALIA:
BALANCE SHEETS AS AT 31 DECEMBER**

	2026	2027	2028
	\$	\$	\$
Cash at bank	1 500	4 400	1 500
Accounts receivable	9 600	10 600	12 000
Inventory	35 000	34 000	40 000
Computer	–	–	3 000
Shop fittings*	14 000	12 000	10 000
Delivery vehicle*	32 000	26 000	20 000
Premises	210 000	210 000	210 000
TOTAL ASSETS	302 100	297 000	296 500
Accounts payable	14 000	15 000	16 500
Loan (interest-only loan: due 2029)	60 000	60 000	60 000
	74 000	75 000	76 500
Capital	228 100	228 100	222 000
Net profit	42 000	39 000	27 000
	270 100	267 100	249 000
Less: Drawings	42 000	45 100	29 000
	228 100	222 000	220 000
TOTAL EQUITIES	302 100	297 000	296 500

* Non-current assets have been reported at carrying value (i.e. historical cost less accumulated depreciation).



» The management of Adventure Australia stated the following business objectives for the 2027 and 2028 reporting periods:

- 1 to increase sales by 10% above the previous year's result
- 2 to increase net profit by 5% above the previous year's result
- 3 to maintain a gross profit margin of at least 45%
- 4 to maintain a net profit margin of at least 15%
- 5 to achieve a return on owner's investment of at least 20%
- 6 to achieve an inventory turnover of 90 days or less
- 7 to maintain an average settlement period of less than 30 days for accounts receivable
- 8 to maintain an average settlement period of 30–45 days with the accounts payable.

- a** For each of the above objectives, state whether it was achieved in both 2027 and 2028.
- b** Where appropriate, suggest possible reasons if objectives weren't achieved. Calculate the appropriate financial indicator in each case and clearly identify the trend in the indicators.



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XL template

EXAM-STYLE QUESTIONS

Question 1 (3 marks)

A business owner commented: 'If my inventory turnover increases, my gross profit must also increase.' Do you agree? **Explain** your answer fully.

Question 2 (3 marks)

The owner of Wally's Whitegoods is confused. He has managed to achieve a faster asset turnover, up from five times per annum to seven times per annum. He expected that this would also mean that his return on assets would increase. **Explain** fully why this may not be the case.

Question 3 (5 marks)

The following data has been provided in relation to the business of Bundoora Sports.

	2027	2028
Gross profit margin	50%	47%
Net profit margin	10%	14%
Return on owner's investment	20%	24%
Inventory turnover	34 days	25 days

The owner is quite concerned about the performance of her business. One friend has told her that her profitability has improved. Another has said that she is making less from every sale and that her profitability has decreased.

Discuss the changes in the financial indicators provided above and explain to the owner what these figures show about her business.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 23

15 16 17 18 19 20 21 22 23



Additional performance indicators

In this final chapter, you will look at two more financial indicators – liquidity and gearing – as well as non-financial tools and factors for analysing a business's performance.

KEY TERMS

Liquidity
Working capital
Working capital ratio
Quick asset ratio
Cash flow cover
Gearing
Debt ratio

Learning objectives

By the end of this chapter, you will be able to:

- **prepare** a variety of indicators to examine the area of liquidity [23.1, 23.2]
- **prepare** a variety of indicators to examine the area of gearing [23.3]
- **evaluate** a business using both financial and non-financial indicators [23.4, 23.5]
- **describe** some non-financial methods of analysis [23.5]
- **outline** the limitations of ratio analysis [23.5]

PRIOR KNOWLEDGE

CHAPTER 2: Balance sheets

CHAPTER 14: Cash flow statements

CHAPTER 20: Budgeting

CHAPTER 22: Evaluation of business performance



Estimated time required: 1 week





23.1 Liquidity analysis

liquidity the ability of a business to meet its short-term debts as they fall due

Liquidity is the ability of a business to meet its short-term debts as they fall due (usually, in the next 12 months). For a trading business to survive, it must have sufficient 'liquid' funds available to make certain payments on time. These payments include expenses, accounts payable, GST debts, loan repayments and proprietor's drawings.

Efficiency ratios, such as inventory turnover and accounts receivable turnover, are very important to liquidity. If a business takes a long time to turn its inventory into sales, it puts more pressure on its liquid funds. A slower accounts receivable turnover has the same effect, as the business has to wait longer to collect its cash.

Unfortunately, many expenses incurred in running a business won't wait – employees and rent have to be paid. It's important that management has information relating to the business's ability to meet these debts as required. Liquidity indicators can provide some of this information.

'Liquid' funds are those available to pay short-term expenses and debts.



Working capital ratio

Working capital = Current assets – Current liabilities

$$\text{Working capital ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

working capital the liquidity of a business, expressed in dollars

Working capital is a dollar measure of the amount of liquid funds a business has. It's based on the theory that if current assets are greater than current liabilities, a business is likely to meet its debts in the next 12 months. If current liabilities exceed current assets, the business may be facing a liquidity problem.

Remember the definition of the two classifications from the balance sheet:

- Current assets are expected to be turned into cash within the next 12 months.
- Current liabilities are obligations due for repayment within the next 12 months.

It's logical to compare one group with the other to evaluate a business's liquidity.

The **working capital ratio** examines the relationship between current assets and current liabilities in a different way. Rather than simply stating working capital as a dollar value, the assets are divided by the liabilities and the result is expressed in a ratio or as a percentage.

Consider the example of Echuca Essential, a business selling essential oils and natural fragrances.

		2027	2028
Current assets (CA)		\$30 000	\$28 000
Current liabilities (CL)		\$12 000	\$14 000
Working capital (CA – CL)		\$18 000	\$14 000
Working capital ratio	CA	\$30 000	\$28 000
	CL	\$12 000	\$14 000
	=	2.5:1	2.0:1
	or	250%	200%

working capital ratio
a measure of the liquidity of a business, expressed as a ratio or percentage

Although the working capital ratio can be expressed as a percentage or as a ratio, for VCE Accounting exams the data will be stated as a ratio: 2:1, in this example.

Echuca Essential's working capital ratio decreased from 2027 to 2028. This ratio may be expressed as a percentage (as shown above), or it may be stated in more comparative terms:

- At the end of 2027, the business had \$2.50 of current assets for every \$1.00 of current liabilities.
- On balance day of 2028, the business had \$2.00 of current assets for every \$1.00 of current liabilities.

These results indicate that Echuca Essential is unlikely to have any problems meeting its short-term debts, even though liquidity fell in the second year.

There is no ideal percentage for a working capital ratio. If the ratio is less than 1:1, the business may have a liquidity problem in the forthcoming year. Some owners prefer a ratio closer to 2:1, as it provides a safety margin for any unforeseen problems.

The trend in the ratio is also important. Management should examine changes in working capital carefully, and ideally the ratio should be determined more than once a year. A monthly or quarterly calculation gives management more up-to-date information on liquidity.

Managing working capital

No matter how often working capital ratios are calculated, working capital requirements will vary from business to business. Therefore, a figure shouldn't be set ahead as a hard-and-fast rule. Some businesses trade successfully with low working capital, while others require a higher percentage. The difference is in their cash cycles.

Consider the following two businesses:

- **Echuca Essential:** all purchases are on credit, all sales are made for cash, inventory turnover is very fast.
- **Shepparton Antiques:** all purchases are for cash, all sales are on credit, inventory turnover is very slow.

Echuca Essential could trade successfully with much lower working capital than Shepparton Antiques. This is possible because Echuca Essential buys its inventory on credit (perhaps on terms of 30 days) and sells for cash. Depending on how fast its inventory turnover rate actually is, the business may be able to sell all its inventory before it has to pay its accounts payable. If so, it doesn't need to keep a large amount of funds tied up in working capital.

By contrast, Shepparton Antiques requires more working capital to cover the time it takes to sell its goods and collect from accounts receivable. If a business sells on credit, it must ensure it has sufficient funds to meet its operating costs during its extended operating cycle.

Another consideration is whether the working capital ratio is too high. A ratio of 4:1 or 5:1 may indicate that the percentage of current assets to current liabilities is much greater than the business's requirements. This might not seem like a problem at first, but it can indicate other issues. For example:

- The business has over-invested in current assets and has too much money tied up in cash at bank, inventory or accounts receivable. A business should only keep enough cash in a normal trading account to meet its needs. If excess cash is available, it should be put to use; for example, the business could pay off debts, buy non-current assets or invest the excess cash.
- The business has too much inventory. Excess inventory can cost a business money in storage costs, insurance and a greater chance of damage, shoplifting and obsolescence.
- The business has an excessive balance in accounts receivable. Bad debts, debt collection fees and legal costs all add up to be a costly exercise when credit accounts aren't collected over an extended period.

The working capital ratio must reflect a business's needs. A suitable level of working capital for one business may not be appropriate for another. Management should monitor trends in the ratio and always investigate any significant changes.

As accounts receivable and inventory are major determinants of the working capital ratio, it's essential to examine their individual ratios whenever changes in working capital are identified.

Quick asset ratio

$$\text{Quick asset ratio} = \frac{\text{Current assets} - (\text{Inventory} + \text{Prepaid expenses})}{\text{Current liabilities}}$$

quick asset ratio a measure of immediate liquidity

While the working capital ratio looks at the short-term liquidity of a business (the next 12 months), the **quick asset ratio** looks at the immediate liquidity of the business.



The quick asset ratio has significant differences from the working capital ratio:

- Prepaid expenses are removed from the total of current assets because prepayments can't usually be turned into cash if a business has an urgent need for liquid funds.
- Inventory is also removed from the total of current assets because a business can't completely liquidate its inventory in order to meet debts. Even if it could achieve this by reducing its selling prices to ridiculous levels, it would have to replace the goods sold if it expects to continue trading.

When these items are removed from the totals of current assets, the quick asset ratio basically becomes a comparison of cash at bank and accounts receivable with the amount owing to current liabilities. It looks at the assets that can be turned into cash urgently (i.e. quick assets) and at the debts that must be met in the very near future (i.e. urgent debts).

In order to compare the quick asset ratio with the working capital ratio, let's look at Echuca Essential again.

	2027	2028
	\$	\$
Current assets	30 000	28 000
Inventory	17 000	19 000
Prepaid expenses	1 000	1 000
Current liabilities	12 000	14 000

For 2027:

$$\begin{aligned}
 \text{Quick asset ratio} &= \frac{\text{Current assets} - (\text{Prepaid expenses} + \text{Inventory})}{\text{Current liabilities}} \\
 &= \frac{\$30\,000 - (\$1\,000 + \$17\,000)}{\$12\,000} \\
 &= \frac{\$12\,000}{\$12\,000} \\
 &= 1:1 \text{ or } 100\%
 \end{aligned}$$

Note

For assessment purposes, the quick asset ratio will be presented as a ratio and not as a percentage. In this example, it would be expressed as 1:1 for 2027 and 0.57:1 for 2028.

For 2028:

$$\begin{aligned}
 \text{Quick asset ratio} &= \frac{\$28\,000 - (\$1\,000 + \$19\,000)}{\$14\,000} \\
 &= \frac{\$8\,000}{\$14\,000} \\
 &= 0.57:1 \text{ or } 57\%
 \end{aligned}$$

These quick asset ratios show an unfavourable trend over the period 2027–28:

- On balance day of 2027, the business had \$1.00 of quick assets to meet every \$1.00 of urgent liabilities.
- In 2028, this relationship has deteriorated to the extent that the business now has only \$0.57 of quick assets for every \$1.00 of urgent debts.

This ratio is evidence that the liquidity of the business has decreased. Although its very fast cash cycle may allow Echuca Essential to operate with a low quick asset ratio, such a change in the ratio over a 12-month period is a warning to management to keep a close watch on future events. If the decline continued in the next period, the business may simply run out of cash.



23.2 Liquidity and cash flows

Both the working capital and quick asset indicators provide management with useful information on balance day. However, the data used to determine these two liquidity ratios comes from the balance sheet. Since the cash flow statement should be prepared at the end of every period, this report should also be considered when evaluating liquidity.

There is a logical connection between the cash flow statement and liquidity. The focus of the entire report is inflows and outflows of cash, providing a summary of what has happened to the cash resources of the business over time.

Consider the following cash flow statement for a small business that sells automotive parts.

**GP AUTO PARTS: CASH FLOW STATEMENT
FOR THE YEAR ENDED 30 JUNE 2028**

	\$	\$
Cash flows from operating activities		
Cash sales	160 000	
GST received	16 000	176 000
Cash purchases of stock	(90 000)	
Wages	(49 000)	
GST paid	(9 000)	(148 000)
<i>Net cash from operating activities</i>		28 000
Cash flows from investing activities		
Purchase of shop fittings	(6 000)	
<i>Net cash used in investing activities</i>		(6 000)
Cash flows from financing activities		
Mortgage repayments	(8 000)	
Drawings	(21 000)	
<i>Net cash used in financing activities</i>		(29 000)
Net increase (decrease) in cash held		(7 000)
Cash held at beginning of year		2 000
Cash held at end of year		(5 000)

This report may be very valuable when evaluating liquidity. For example, it shows that the business started the period with \$2000 in its bank account, but this had decreased to an overdraft of \$5000 by the end of the period. This, in itself, shows a significant deterioration in the cash supplies of GP Auto Parts, and perhaps also in its liquidity.

However, this information should be read together with financial indicators, such as those for working capital and quick assets. The shortage of cash may not be an issue for management if there are large accounts receivable expected to be settled early in July 2028, or if the owner is planning to inject capital.

Neither financial indicators nor the cash flow statement (or any other accounting report) should be relied upon as the sole source of financial information. It's important to gather as much information as possible to get a full picture of a business's liquidity situation. This may include ratios, reports, vertical analyses, horizontal analyses and trend analyses. Once management has all the relevant data, it should be in a better position to interpret the results accurately.

Cash flow cover

In recent years, there has been more emphasis in the accounting profession on cash management and liquidity analysis. Profitable businesses have had to cease trading because of management's inability to control cash. If cash isn't managed and expenses aren't met on time, a business won't survive. Landlords become uncooperative when rent isn't paid on time. Telephone companies tend to cut off services if phone bills aren't paid. Employees won't work if they aren't paid their wages!

Cash management is crucial to a business's continued operations, and additional indicators were created to look at this area of business. One such indicator is **cash flow cover**, which examines the relationship between the cash flows generated by the business's day-to-day business operations and its current liabilities.

cash flow cover how many times net cash flows can cover expected accounts payable in a reporting period

$$\text{Cash flow cover} = \frac{\text{Net cash flows from operating activities}}{\text{Average current liabilities}}$$

For example, if the average current liabilities of GP Auto Parts were \$2800, the ratio would be:

$$\text{Cash flow cover} = \frac{\$28\,000}{\$2\,800} = 10 \text{ times per annum}$$

This ratio shows that GP Auto Parts generated net operating cash flows equal to 10 times what it owed in current liabilities on balance day. (As usual, remember that average figures are subject to distortion. Seasonal factors may mean that the average for accounts payable is artificially high or artificially low.)

The concept behind this ratio is that a business should have sufficient coverage of its current obligations if it's to survive. If the trend in this ratio is falling (e.g. from 10 times to 8 times in the subsequent period), this may indicate a worsening liquidity position, and management may have to take corrective action. On the other hand, if the ratio increases from 10 times to 15 times, the business is unlikely to have difficulty in meeting its short-term debts.

For a business trading on 30-day terms, it's logical to use 12 times as an acceptable level of cash flow cover. In other words, a year's cash flows can be expected to cover the accounts payable owing at the end of a given month about 12 times. Otherwise, the business isn't producing enough cash over the year to meet its most urgent liabilities.

However, the accounts payable figure on balance day may vary greatly, depending on when the report was prepared. Therefore, it is more important to keep in mind the *trend* in the ratio over several reporting periods. Valuable benchmarks include:

- previous periods' result (i.e. the trend)
- management's expectations or budget objectives.



EXAM-STYLE QUESTION

The following financial indicators were determined by the owner of Gippsland Garden Supplies, who is concerned about the liquidity of the business.

(4 marks)

Indicator	2026	2027	2028
Inventory turnover	28 days	32 days	43 days
Accounts receivable turnover	32 days	28 days	27 days

Describe the trend in the two indicators in relation to the liquidity of the business. Should the owner be concerned? **Justify** your answer.

Sample answer

The two indicators have produced conflicting results. The inventory turnover has become much slower. Over the three-year period, it has become 15 days slower, which is unacceptable. However, the collection of debts from accounts receivable is 5 days faster than it was in 2026. This is acceptable, assuming that standard credit terms of 30 days are on offer, as the average collection period is now only 27 days. Overall, the liquidity has deteriorated, as in 2026 the cash cycle was 60 days (28 + 32) and two years later it has blown out to 70 days (43 + 27). This means the business is now waiting an extra 10 days, on average, before its inventory ultimately turns into cash. Management should view this as a major concern. Even though accounts receivables appear to be under control, the inventory turnover is a huge concern and management should now try to reduce the time taken to turn inventory into sales. Otherwise, this business may face a liquidity crisis in the future.

Exam advice

Questions on financial indicators should be seen as an opportunity for you to demonstrate your knowledge of accounting. For example, in the above example the credit terms of the business weren't provided in the question. Some students may suggest that they cannot therefore analyse the data. A better approach is to state that, assuming credit terms were a standard 30 days, the collections from accounts receivable is now quite acceptable. Rather than seeing this as a restriction, see it as an opportunity to show that you know about credit terms!

Don't provide simplistic answers which just state that inventory turnover is slower by 15 days and accounts receivable turnover is 5 days faster. Also, don't state that more information is required before making an assessment of liquidity. You need to deal with the information in front of you and make logical statements that are supported by the data provided (as shown in the above response).



23.3 Gearing and financial stability



While liquidity ratios examine the short-term future of a business entity, financial stability looks at its long-term structure. A business may be financed using internal funds (owner's equity) or external funds (liabilities). **Gearing** is the dependence of an entity on outside funds, compared with those contributed by the proprietor.

A business is described as *highly geared* when a high percentage of its assets are financed by liabilities. A *lowly geared* business, by contrast, is highly dependent on the proprietor's funds and has borrowed very little from external sources.

A highly geared business is a higher financial risk because there is a greater pressure on the business's resources to meet repayments of debts. If the expected cash inflows don't occur, the owner is still faced with the repayment of liabilities. The ultimate result of this problem may be the collapse of the business. A lowly geared business doesn't have the same pressure, as multiple repayments aren't constantly draining its working capital. Financial stability indicators are calculated to provide management with information relating to changes in the gearing of the business. There are a number of ratios used to measure changes in gearing.

gearing the dependence of a business on borrowed funds, compared to funds contributed by the business owner

Debt ratio

The **debt ratio**, also known as the gearing ratio, determines the percentage of assets actually funded by borrowed funds.

debt ratio a measure of the dependence of a business on liabilities to fund its assets

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} \times 100$$

Consider the following example for Castlemaine Furnishings.

	2027 \$	2028 \$
Total assets	130 000	140 000
Liabilities	50 000	70 000
Owner's equity	80 000	70 000
Debt ratio	50 000	70 000
	130 000	140 000
	= 0.38:1	= 0.50:1
	or 38%	or 50%

Note: For VCA assessment, the debt ratio will be expressed as a percentage.

These ratios indicate that the gearing of this business increased over the two-year period. Its assets increased from \$130 000 to \$140 000, which is positive. However, this increase in assets means that the owner has borrowed more funds from external sources, which has caused the debt ratio to jump from 38% in 2027 to 50% in 2028.

This means that half of Castlemaine Furnishings' assets are now financed by external funds. The financial risk of the entity may increase as a result, as it's under greater pressure from its repayments of debts. For example, if this expansion was funded by additional loans, more cash will have to be put aside for loan repayments each month. This leads to greater pressure on the liquid resources of the business.

In simple terms, the more a business owner borrows, the higher its debt ratio and the more financial pressure it will face.

Gearing and return on investment

The more a business borrows from outside sources, the more likely it is not to survive. The obvious question is: Why would an owner take on a risk that could lead to total financial collapse?

Many small business owners simply don't have enough personal wealth to finance a business without borrowing money from others. A few others borrow money through personal choice and use the borrowed funds to increase their own personal returns.

Consider the following information relating to two skateboard shops, Abbotsford Boards and Brunswick Skate. The businesses are of equal size in terms of total assets; they are in the same industry, and both are owned by sole proprietors. The only difference is that Abbotsford Boards is a highly geared business, whereas Brunswick Skate is lowly geared.

Here are the financial details for the two businesses for the year ended 31 December 2028. Due to its heavy borrowing, Abbotsford Boards has a higher interest expense and therefore its profit is \$10 000 lower than that of Brunswick Skate.

	Abbotsford Boards \$	Brunswick Skate \$
Total assets	100 000	100 000
Liabilities	80 000	10 000
Owner's equity	20 000	90 000
Net profit	15 000	25 000

Note: Brunswick Skate has a much higher capital contribution, as it has borrowed much less from liabilities.

Further emphasising the differences between the two businesses are their debt ratios and two profitability ratios – the return on assets and the return on owner's investment.

		Abbotsford Boards \$	Brunswick Skate \$
Debt ratio	Liabilities	80 000	10 000
	Total assets	100 000	100 000
		80%	10%
Return on assets	Net profit	15 000	25 000
	Total assets	100 000	100 000
		15%	25%
Return on owner's investment	Net profit	15 000	25 000
	Average capital	20 000	90 000
		75%	28%

Low debt = low gearing = lower risk.

High gearing = low capital contribution, which may create a much higher return on investment.

These figures highlight the positive outcomes that may be achieved through using borrowed funds to finance a business:

- Even though Abbotsford Boards achieved a return on assets of only 15%, the owner's personal return on their investment was 75%.
- Brunswick Skate had a higher return on assets (25%), but only generated a return of 28% on the owner's investment.



Although skate shops may all look the same, they could be financed in very different ways. The level of debt will be affected by how much capital the owner can invest.

The owner of Abbotsford Boards has therefore used other people's money to generate a higher return on their personal funds invested in the business.

The two profitability ratios for Brunswick Skate are almost the same, due to the large percentage of funds contributed by the owner and the very small amount borrowed from outside sources.

Even though Abbotsford Boards has generated an incredibly high return on the owner's investment, there is a much greater financial risk. If sales turnover declined in the next period, the management of Abbotsford Boards may struggle to meet its high level of repayments. The opportunity to earn high returns on owner's funds also carries with it greater financial risk and the greater likelihood of financial collapse.

The structure of Brunswick Skate is an example of a more conservative approach to financing. The return on owner's investment may be lower in the current year, but this business has a greater chance of survival in difficult times.

Differences in financial structure are often affected by the personal choices of business owners. Some proprietors are risk takers who are prepared to borrow large sums of money to try to boost their own personal returns. Others are conservative owners who only borrow through necessity and prefer a high equity component.

The ideal situation is a balanced approach between the two extremes. Borrowed funds can be used to increase an owner's personal returns, but liabilities shouldn't increase to such an extent that the repayment of such debts puts the business at risk.

There is no set percentage of gearing that can be defined as totally secure. However, as gearing increases, so too does financial risk, with the ultimate risk for an owner being the loss of everything, including their personal assets. This possible sacrifice must be weighed up against the possible gains that may be achieved through using borrowed funds.

23.4 Other evaluation tools



Accountants, business owners and managers use financial indicators as a starting point in their evaluation of performance. However, these indicators should never be seen as the only relevant tools for evaluating business performance.

Chapter 20 outlined how budget expectations can be used as benchmarks to measure performance, but there are many other tools that may be used at times, which can be calculated as ratios or numerical results.

Customer satisfaction

Customer satisfaction surveys are an example of non-financial analysis that should be used in conjunction with financial indicators. Many small businesses have customer feedback forms, and many more gather feedback via their business website, social media pages or online reviews.

A business's customers can be an excellent source of information. Many will seize the opportunity to tell management exactly what they think of them! Management should review feedback periodically so that they are in touch with customer concerns and needs. If several customers identify a recurring theme, particularly if they are important clients, management should take action.

It's also possible to calculate a ratio to reflect the degree of customer satisfaction. If a business has accepted returns of goods during a period, it's common practice to report this in the income statement, as follows:

Revenue	\$	\$
Sales	50 000	
Less: Sales returns	2 500	47 500

In this business, net sales reported for the period totalled \$47 500. Management may be interested in the fact that the business actually sold \$50 000 worth of goods, but \$2500 of goods were subsequently returned.

A percentage is then calculated, which shows that customers returned 5% of total sales during this period:

$$\text{Sales returns ratio} = \frac{\text{Sales returns}}{\text{Total sales}} = \frac{\$2500}{\$50\,000} = 0.05 \text{ or } 5\%$$

This ratio can be used as a reflection of customer satisfaction (or dissatisfaction). If the percentage of goods being returned increases, it would indicate customers' greater dissatisfaction with the inventory being sold. This may lead management to change some products or some brands, or to purchase inventory from different suppliers.

If a problem is identified by an increase in the percentage of goods being returned, management may decide that it's time for another customer survey. That is, it may use a non-financial tool (a survey) after financial analysis reveals a particular problem.

Customer satisfaction data is useful for assessing a business's performance.



Quality assurance

Just as customers can be surveyed about their satisfaction, business owners should consider how satisfied they are with their own suppliers.

In a similar fashion to the sales returns percentage, management should calculate the percentage of goods returned to suppliers. It could also analyse the number of returns made by customers in terms of which suppliers are involved.

Often a retail outlet may accept a sales return, only to then return the product to the supplier because it's faulty or doesn't perform the task it was designed for. (Of course, if an item is shop-soiled through the fault of the retailer, it shouldn't be returned to the original supplier.)

To ensure that customers are satisfied, the business owner must strive to find suppliers who will provide reliable products. Once again, a simple ratio can be used to quantify this information.

$$\text{Purchases returns ratio} = \frac{\text{Purchases returns}}{\text{Total purchases}}$$

Profit compared to hours worked

Many small business owners go into business because they don't want to work for someone else. Being your own boss is appealing to many people. However, it often has a major disadvantage: a business owner can't simply clock off at the end of the day. They have to complete many tasks, some of which may have to be done after hours, such as:

- finalising inventory orders
- completing a stocktake
- updating accounting records
- calculating wages records
- keeping GST records
- emailing slow-paying accounts receivable.

As a result of these demands, many business owners work 60–80 hours per week. Some may question whether it's worth it. That's a difficult question to answer, as making money isn't the only reason why people go into business – although it's usually the main one! The feeling of being independent, the opportunity to achieve a lifetime dream, and the chance to make something out of nothing are all common reasons for going into business.

An interesting consideration for some business owners is the following calculation.

$$\text{Profit per hour} = \frac{\text{Net profit for the period}}{\text{Hours worked by the owner}}$$

Imagine that a person resigned as an employee because their salary was only \$62 400 (working a 40-hour week), and there was an opportunity to earn \$78 000 working 75 hours per week as a small business owner. The two situations can be compared:

- Salary earner: $\frac{\$62\,400}{52 \text{ weeks}} = \$1200 \text{ per week}$
- Business owner: $\frac{\$78\,000}{52 \text{ weeks}} = \$1500 \text{ per week}$

Salary earner:

$$\frac{\text{Income per week}}{\text{Hours worked per week}} = \frac{\$1200}{40 \text{ hours}} = \$30 \text{ per hour}$$

Business owner:

$$\frac{\text{Income per week}}{\text{Hours worked per week}} = \frac{\$1500}{75 \text{ hours}} = \$25 \text{ per hour}$$

Has the business owner made the right choice? There is no simple answer. Many business owners are happy to work extra hours because of the potential benefits. It's a matter of personal choice, and of whether an individual is self-motivated, organised and prepared to work hard to establish a successful business venture. Of course, most business owners don't see that they are tied down to a particular salary or wage. Most have plans of growing their business in the future so that their personal income can grow over time.

The Australian economy needs people to take on the role of small business owners. It also needs individuals to fill the wage and salary positions in both small and larger businesses. The decision to go into business will often be a personal one that requires particular personality traits.

Accounting can play a small role in providing useful tools to assess the performance of business owners. Some of these tools may help individuals decide whether it's worthwhile to remain a business owner.



23.5 Non-financial factors

There are a range of financial indicators that can be used to evaluate a business's performance. Although these indicators are important, there are also non-financial factors that can assist a business owner when evaluating performance.

As a general rule, if an evaluation tool involves a dollar sign, it would be classified as a financial indicator. A tool that doesn't involve specific dollar figures is a non-financial factor. For example:

- Calculating sales returns as a percentage of the total sales made is a financial indicator.
- The number of times goods had to be returned to suppliers is a non-financial factor.

This section looks at a few different non-financial factors, but there is no limit to the ways a business owner can evaluate the performance of their business. What's important is that meaningful data is collected, whether it's financial or non-financial. Once the data has been gathered, it needs to be analysed and interpreted so that management can make sound decisions to ensure the future success of the business.

Quality of management

To be successful, a small business owner needs a range of management and other skills.

- *Good communication skills.* An owner must be able to deal with customers, staff, suppliers, bankers and government agencies.
- *Adequate management skills.* Chapter 14 covered the areas of managing and controlling inventory, accounts receivable and accounts payable.
- *The ability to adapt to change.* Business owners who refuse to change their management practices may keep making the same mistakes. They need a vision for the future.

- *The ability to develop or sell new products.* Successful owners quite often are ahead of market changes because they anticipate what is likely to happen in the future.
- *Flexibility in responding to customers' needs.* All customers are different and should be treated on an individual basis.
- *The ability to recognise their own weaknesses.*

Many small businesses fail because of a weakness in management skills. Some business owners adopt an 'I know it all' approach and can't critically evaluate the performance of management – because they are the management! However, not all owners are managers, and an owner may in fact conduct a review of their management team. This should help them to identify weaknesses and to address problems.

Staff are usually willing to participate in an appraisal of management performance. In some businesses, they may be asked to comment on a range of issues so that the quality of management can be reviewed and improved. As the decisions of management have a direct impact on the financial performance of a business, such comments shouldn't be ignored.

Economic climate

Consider the general state of the economy when analysing the performance of a business. The economic climate may cover a whole range of possible events and factors, some of which impact on some businesses more than others. These include:

- consumer confidence
- market competition
- the actions of big business
- government decision-making (e.g. the introduction of new taxes)
- wage demands by unions
- technological change
- market trends.



One of the biggest challenges to management is staying flexible in a changing economic climate. Business owners who become set in their ways and refuse to change usually won't survive in the long term. When evaluating results, it can be difficult to explain why things changed. It's easy to calculate a ratio and to identify an increase or a decrease; finding out why it's happened is much harder.

Even if an owner knows why something happened, there is always the challenge of deciding what to do next. What decisions should the owner take for the future of the business? This is the basic challenge of being a business owner. A successful business owner has a working knowledge of the economic climate and of how changes in this climate affect their business.

Other non-financial factors

While financial indicators are important, there are many non-financial factors that can help a business owner to evaluate performance.

Meaningful non-financial factors may include:

- the number of times goods are returned by customers in one period
- the number of times goods are returned to suppliers in one period

- customer satisfaction surveys
- employee satisfaction surveys
- the number of customers who visit the business in a given period
- the number of hits on a business website
- the number of sales made in a period (as distinct from the value of sales)
- the number of repeat customers in a period
- the postcodes of customers (showing the scope of the market).

There is no limit to the ways a business owner can evaluate their business's performance. What is important is that meaningful data is collected, whether it's financial or non-financial data. Once it has been gathered, management needs to analyse and interpret it in order to make sound decisions to ensure the future success of the business.

Limitations of financial analysis

Although indicators can provide management with a vast array of financial information, there are some inherent limitations of such analysis. Financial indicators can only be as accurate as the information on which they are based.

The use of indicators may be questionable, or of limited value, for several reasons:

- *Financial indicators are based on historical data.* Indicators may provide a historical summary of a business's operations, but there is no guarantee that the past results will correspond to the future results of the business.
- *Changes in the value of the dollar.* Much of the information used in accounting is based on dollar values. Sometimes items in reports may change simply because of the change in what a dollar represents. For example, in times of inflation, sales revenue may increase over time, even though the same number of units has been sold. This type of change should be taken into account when comparing indicators, but it is often difficult to identify.
- *Changes in accounting methods.* Sometimes management may decide to change accounting methods. The concept of relevance demands that the impact of any such changes be identified as part of the annual reporting process. However, once changes have been made, comparisons of financial indicators become more difficult.
- *Inter-business differences.* Many indicators lend themselves to comparisons with the performance of other similar businesses. However, every business is unique in terms of financial structure, assets, revenues and expenses, so comparisons with other businesses must be made carefully. Industry averages are often suggested as a means of comparison, but the business in question may not resemble the typical or average business.
- *Frequency of reporting.* Some forms of analysis are most useful when frequent reporting allows regular comparisons of results to be made. Unfortunately, many small trading businesses complete a minimal amount of reporting each period.
- *Limited information.* Most proprietors have a limited accounting background (if any), and many don't use a comprehensive reporting system. Therefore, limited information leads to limited analysis.



Practise and apply

23



REVISION: SUMMARY OF KEY CONTENT

- [23.1]** Liquidity is the ability of a business to meet its short-term debts as they fall due. For a trading business to survive, it must have sufficient working capital available to meet its short-term and immediate financial needs.
- [23.2]** Cash management is crucial to a business's continued operations. A key indicator for cash management is cash flow cover, or how many times net cash flows can cover expected accounts payable in a reporting period.
- [23.3]** Gearing is the dependence of a business on outside funds, compared with those contributed by the proprietor. A highly geared business is dependent on loans and financing from external sources, while a lowly geared business is highly dependent on the proprietor's funds and has borrowed very little from external sources.
- [23.4]** Many financial indicators can be calculated as ratios or numerical results, based on financial activity. These include sales returns ratios measuring customer satisfaction, purchases returns ratios measuring quality assurance from suppliers, and comparisons of profit to hours worked for the business owner.
- [23.5]** Financial indicators are only as accurate as the information on which they are based and cannot measure every aspect of a business's performance. Non-financial factors, such as the current economic climate or the quality of management, also need to be considered.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Evaluation of liquidity

Consider the following balance sheet information, which relates to two different businesses as at 30 June 2028.

	Collingwood Comics	Greensborough Comics
	\$	\$
Current assets	41 500	47 700
Current liabilities	35 800	42 600

- Calculate the working capital for both businesses as at 30 June 2028.
- Determine the working capital ratio for both businesses.
- Which business has the better liquidity? Compare the liquidity of the two businesses and comment on the differences between them.



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2 Evaluation of liquidity

The following information is provided by the proprietor of Martello's Menswear.

BALANCE SHEET DATA AS AT:

	31/12/27	31/12/28
	\$	\$
Cash at bank	3 400	Nil
Accounts receivable	5 200	4 800
Inventory	34 500	32 600
Bank overdraft	Nil	1 200
Accounts payable	5 800	6 000
GST clearing	1 000	1 500
Accrued expenses	500	1 000

- Calculate the working capital ratio for Martello's Menswear for 2027 and 2028.
- Comment on the business's liquidity with reference to the ratios determined in part **a**.
- Make a list of other information you would recommend be considered to enable further comment on the liquidity of the business.

3 Evaluation of liquidity

Consider the following information, which relates to two different businesses as at 30 June 2028.

	The Tool Shed	Huntingdale Tools
	\$	\$
Cash at bank	4 500	2 900
Accounts receivable	8 300	11 800
Inventory	32 400	38 200
Accounts payable	10 400	13 800
GST clearing	1 200	1 100

- a** For each of the two businesses, calculate the:
- i** working capital ratio
 - ii** quick asset ratio.
- b** Comment on the differences in the liquidity structure of the two businesses, including references to the ratios calculated in part **a**.

4 Evaluation of liquidity

The following items were extracted from the balance sheets of Nicoletti's Costuming Supplies.

	31/12/27	31/12/28
	\$	\$
Cash at bank	3 900	4 400
Accounts receivable	11 200	15 500
Inventory	43 900	42 400
Prepaid expenses	1 500	2 000
Bank overdraft	2 800	Nil
Accounts payable	15 000	16 800
GST clearing	1 400	1 700
Accrued expenses	1 500	1 000

- a** Calculate the working capital ratio for both 2027 and 2028.
- b** Comment on the change in the working capital ratio over the two years.
- c** Calculate the quick asset ratio for 2027 and 2028, and comment on the change in the ratio.
- d** Working capital and quick asset ratios both look at liquidity. Explain the difference between these two forms of ratio analysis.
- e** Outline the role that cash budgeting plays in evaluating a firm's liquidity.

5 Evaluation of liquidity

The owner of Waverley Street Fashions reports that cash provided by operating activities in the year ended 30 June 2028 was \$82 400. Current liabilities as at that date totalled \$10 300. For the previous year, cash flows from operations were \$71 900, with current liabilities of \$11 300.

- a** Calculate the cash flow cover for each of the two years.
- b** Has the liquidity of the business improved or deteriorated over the past two years? Explain fully.
- c** What other information would help you to comment on this business's liquidity?



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6 Evaluation of reports

The management of Emerald Jewellers has completed final accounting reports for the year ended 30 September 2028. The following information has been extracted from these reports.

<i>From the cash flow statement:</i>	
Net cash provided by operating activities	\$32 000
Net decrease in bank for the year	\$4 500
<i>From the income statement:</i>	
Gross profit	\$43 000
Net profit	\$5 000
<i>From the balance sheet:</i>	
Cash at bank balance	\$3 200
Current liabilities	\$8 400
Drawings for the year (all cash)	\$16 000

- State two possible reasons why cash at bank decreased over the period despite \$32 000 being provided by operating activities.
- Explain why this business has reported such a small net profit when it has such a healthy gross profit.
- Give two reasons why net cash flow from operations was \$32 000, but net profit was only \$5 000.
- Calculate the net cash flow cover as at 30 September 2028.
- The cash flow cover as at 30 September 2027 was calculated as 6.5 times. Make a brief comment on the current situation, taking into account last year's result.



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7 Evaluation of gearing

Western Trading has total assets of \$220 000 and owner's equity of \$140 000. Northern Trading has owner's equity of \$82 000 and total assets of \$120 000.

- Calculate the debt ratio for each business.
- Which of the two businesses has the higher gearing? Explain your answer fully.
- Explain the link between gearing and financial risk.



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8 Evaluation of gearing and returns

The following information was extracted from the books of two similar businesses.

	Mt Hotham Gifts	Bairnsdale Gifts
	\$	\$
Liabilities	32 600	46 800
Owner's equity	64 400	56 200
Net profit	25 000	25 000

- Calculate the following financial indicators for each of the two businesses:
 - debt ratio
 - return on assets
 - return on owner's investment.
- Comment on the different financial structures of the two businesses.
- Compare the profitability ratios for the two businesses and explain the differences between them.
- State one advantage and one disadvantage of being the owner of a highly geared business.

9 Evaluation of gearing and returns

The following information has been provided by the proprietors of two similar-sized businesses.

	Superior Electricals	Supreme Electricals
	\$	\$
Liabilities	70 000	50 000
Owner's equity	80 000	100 000
Net profit	22 000	26 000
Net cash from operating activities	28 000	32 000

- a Calculate the following ratios for both businesses:
 - i debt ratio
 - ii return on assets
 - iii return on owner's investment.
- b Write a brief comment comparing the gearing of the two businesses.
- c Comment on the profitability of the two businesses.
- d Of the two businesses, which one has the greater capacity to borrow? Explain your answer fully and refer to any relevant ratios.

10 Evaluation of customer satisfaction

The owner of Frankston Fashions has extracted the following information from the business's last three income statements. She is pleased about the trend in the results, as total sales and net sales have increased every year. However, she is concerned about the number of returns.

	2026	2027	2028
	\$	\$	\$
Revenue			
Sales	86 900	92 400	98 600
Less: Sales returns	3 476	5 544	6 902
Net sales	83 424	86 856	91 698

- a Calculate the sales returns ratio for each of the three reporting periods.
- b Comment on your results from part a, in light of the owner's concerns.

11 Evaluation of quality of inventory

Michael Howard is the owner of Peninsula Puzzles, a small business that sells a range of puzzles, games and entertainment products. He has always emphasised good-quality inventory, but lately some of his customers seem dissatisfied. He provides you with the following details.

	2027	2028
	\$	\$
Total sales	86 000	84 200
Sales returns	1 720	2 100
Total purchases	42 300	42 600
Goods returned to suppliers	1 270	1 700

- a Calculate the sales returns and purchases returns ratios for 2027 and 2028.
- b Comment on the results in part a. Does this business owner have a problem?
- c Suggest a possible solution to the situation you have identified in this business.



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12 Evaluation of performance: Advanced

The following information relates to Tollitt Trading, an import–export business, and covers three consecutive reporting periods.

INCOME STATEMENTS FOR THE YEARS ENDED 31 DECEMBER:

	2026	2027	2028
	\$	\$	\$
Credit sales	92 000	98 000	94 000
Less: Cost of sales	55 200	53 900	54 050
Gross profit	36 800	44 100	39 950
Less: Wages	22 000	25 000	26 000
Office expenses	7 500	7 000	7 500
Interest	2 500	2 000	1 500
Total expenses	32 000	34 000	35 000
Net profit	4 800	10 100	4 950

From the cash flow statement: net cash provided by operating activities: 2026: \$28 000; 2027: \$20 000; 2028: \$16 000.

BALANCE SHEETS AS AT 31 DECEMBER:

	2026	2027	2028
	\$	\$	\$
Cash at bank	3 000	4 000	2 000
Accounts receivable	5 000	8 000	8 000
Inventory	14 000	14 000	16 000
Fittings (book value)	15 000	12 000	9 000
Premises	120 000	120 000	120 000
Total assets	157 000	158 000	155 000
Accounts payable	6 000	3 000	7 500
GST clearing	2 000	3 000	2 500
Loan from NAB	32 000	28 000	26 000
Capital – Tollitt	117 000	124 000	119 000
Total equities	157 000	158 000	155 000

*The owner of the business has stated that the 2025 figures were virtually identical to the 2026 results.

a Calculate the following financial indicators for each of the three years:

- gross profit margin
- net profit margin
- expense ratios
- return on owner's investment
- return on assets
- asset turnover
- inventory turnover
- accounts receivable turnover
- accounts payable turnover
- cash flow cover
- working capital ratio
- quick asset ratio
- debt ratio.

b Write a report on the trends revealed in the ratios calculated above. Separate sections of the report should consider the business's profitability, liquidity and financial stability.

MODELLING EXERCISE

Sophie's Deluxe Burgers is a small business owned by Sophie Reid. It has been very popular for a number of years, but lately a few customers have started complaining about the plastic containers Sophie uses for her burgers. Some of them have been found in the street and, unfortunately, her business name is printed all over them. Although this isn't her fault, Sophie has received some negative comments about the litter and she is concerned about losing customers as a result. She has always used the plastic containers as they are the cheapest available, costing only 20 cents per container. The following details are available in relation to the finances of Sophie's Deluxe Burgers.

Monthly data:	Number of burgers sold	\$2500
	Average selling price per burger	\$9
	Average cost price per burger	\$4
	Monthly expenses	\$3000

After receiving the negative comments about her business's use of plastic containers, Sophie has investigated three alternatives:

- Option 1* Keep using the plastic containers, as they are the cheapest alternative.
- Option 2* Replace the plastic containers with cardboard containers, which cost 25 cents each.
- Option 3* Replace the plastic containers with recycled cardboard containers, which cost 30 cents each.

As Sophie is aware that some customers have been annoyed with the current situation, she has decided to run an advertising campaign in the local area for the next three months. She will advertise her new approach and how she is being more environmentally aware. This will cost her \$1500 per month, but once the message gets out to her customers she expects to increase her sales by at least 4% each month.

- a** Prepare comparative income statements showing the results for the three options Sophie is considering.
- b** Discuss the alternatives available to Sophie, including any financial and ethical considerations. Make a recommendation that you believe would be of maximum benefit to her business.

EXAM-STYLE QUESTIONS

Question 1 (4 marks)

Describe and **explain** the two reasons a business owner may decide to borrow money for their business.

Question 2 (4 marks)

State and **explain** two non-financial indicators that the owner of a jeans store could utilise to help evaluate the performance of their business.

Question 3 (4 marks)

When a business borrows more cash, there are several implications for the business owner to consider. **Explain** how each of the three accounting reports (income statement, cash flow statement and balance sheet) will usually be affected by increases in debt.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Glossary

accounting assumptions accepted practices and assumptions followed when creating financial reports

accounting entity assumption the requirement that a business has its own financial status and a separate position from that of its owner or other entities

accounting standards rules and regulations that outline acceptable accounting practices and procedures

accounts payable businesses owed money as a result of providing inventory on credit

accounts payable turnover a financial indicator that determines the average time taken by a business to pay its accounts payable

accounts receivable customers who owe the business money as a result of being provided with goods on credit

accounts receivable turnover a financial indicator that determines the average time taken by accounts receivable to settle their accounts

accrual accounting a system of determining profit where revenue earned is matched with expenses incurred; any difference is the profit (or loss) for the period

accrual basis assumption recording revenue when it is earned and expenses when they are incurred

accrued expense expense that has been incurred during a period but not yet paid, remaining as a liability on balance day

accrued revenue revenue that has been earned but not yet received

accumulated depreciation the total amount of depreciation that has been written off from the date the asset came under the control of the business until the present time

adjusted gross profit the result of adjusting gross profit for either an inventory loss or an inventory gain

adjusted trial balance a trial balance prepared after the recording of balance day adjustments has been completed

adjusting entry a general journal entry used to adjust revenue and expense accounts (*see* balance day adjustments)

age analysis of accounts receivable a table that classifies accounts receivable according to the age of their debt

allowance for doubtful debts a negative asset account based on predictions of future bad debts

analysis chart a table used to break a transaction down into debit and credit entries

analysis the process of breaking down something complex into simpler, smaller parts

analytical ratio a comparison of two related items in order to analyse an aspect of business performance

asset turnover a measure of how well assets have been used to generate sales

assets economic resources under the control of an entity that have the potential to produce economic benefits

bad debt an expense account created when an accounts receivable is written off as unable to be recovered

balance day adjustments adjustments made to revenue and expense accounts at the end of a period so that they equal revenue earned and expenses incurred

balance sheet an accounting report that states the financial position of a business at a particular point in time

balancing an account entering a missing figure on one side of a ledger account to bring it to the total on the other side

bank statement a document that summarises all cash transactions between a bank and its customer

benchmarks tools used to measure performance by comparing financial results against some established criteria

budgeted balance sheet an accounting report that shows estimates of assets, liabilities and owner's equity at a specific future date

budgeted cash flow statement an accounting report that shows estimates of cash receipts and payments, and bank balance, for a particular future period

budgeted income statement an accounting report that shows estimates of revenues, expenses and profit over a specific future period

budgeting the process of preparing a financial plan for a business

business documents documents that record the raw financial data of a business's transactions

capital assets a person invests in a business

carrying value the original cost of an asset less accumulated depreciation

cartage inwards an expense incurred when inventory is delivered into a business

cartage outwards an expense incurred when inventory is delivered to a customer

cash all money on hand, plus cash equivalents

cash cycle the process of turning inventory into sales, and then turning these sales into cash

cash equivalents short-term liquid assets that can be quickly converted into cash

cash flow cover how many times net cash flows can cover expected accounts payable in a reporting period

cash flow statement an accounting report used to show all inflows and outflows of cash during a reporting period, and the cash balance at the end of that period

cash flows from financing activities cash flows that occur as a result of changes in the financial structure of a business

cash flows from investing activities cash flows that relate to the sale or purchase of non-current assets

cash flows from operating activities cash flows that result from the day-to-day operations of a business

cash receipt a business document used to verify that cash has been received from an outside entity

closing entry a general journal entry used to close off a revenue or expense account

common size statements reports that use percentages, rather than dollar values, to allow easier comparison of results

comparability the ability to compare similar types of financial information effectively with other entities or over different reporting periods

correcting entry a general journal entry made in order to correct an error

cost of goods sold the subheading in an income statement that includes all expenses incurred in purchasing inventory and getting items ready for sale

credit note a source document used to acknowledge the return of goods

debt ratio a measure of the dependence of a business on liabilities to fund its assets

depreciation the allocation of the cost of a non-current asset over its life

depreciation expense the amount of depreciation written off as an expense for one particular period

double entry accounting a system in which two ledger entries, a debit and a credit, are made for each transaction

drawings a withdrawal of assets by the proprietor of a business

EFT receipt a document issued when an EFT payment has been made

EFTPOS Electronic Funds Transfer at Point of Sale

entity any person, business or organisation for which accounting records are maintained

expense budget a list of predicted expense items for a future reporting period

expense ratio (expense/sales) may also be used for total expenses (total expenses/sales)

expenses decreases in assets, or increases in liabilities, that result in a decrease in owner's equity

expired cost the value of a non-current asset that has already been written off as depreciation

fair value an estimate of an asset's value, used when a second-hand asset is contributed to a business

faithful representation the requirement that financial information must accurately reflect economic events

favourable variance (or positive variance) a situation in which the actual result is better than the result predicted in the budget

First-In, First-Out (FIFO) method a system of recording inventory costs, based on the assumption that the first goods purchased are the first goods sold

gearing the dependence of a business on borrowed funds, compared to funds contributed by the business owner

general ledger a collection of ledger accounts in which double entry accounting is used

going concern assumption a business will continue to operate, and isn't expected to be wound up in the near future

gross profit margin the percentage of the sales dollar remaining after cost of goods sold has been taken into account

GST liability an obligation to the ATO because the business has collected (or charged) more GST than it has paid

GST refund an amount owed by the ATO because the business has paid (or been charged) more GST than it has collected

horizontal analysis the comparison of financial results across the page, usually by reporting on several consecutive trading periods

Identified Cost method the system of recording the actual cost of each individual unit of inventory

income statement an accounting report used to show a business's revenue, expenses and net profit (or loss)

information flow the distribution of data through a business

instalment loan a loan that requires scheduled repayments of both principal and interest throughout its life

interest-only loan a loan that only requires payment of interest during its life, with the amount borrowed repaid in one lump sum at the end

interpretation the process of explaining the meaning of a financial item or analytical ratio

inventory goods purchased by a trading business for the purpose of selling them at a higher price

Inventory account the general ledger account used to record transactions affecting inventory

inventory card a subsidiary record used to note down all movements of an individual inventory item

inventory sheet a record used to note details of goods on hand when doing a physical stocktake

inventory turnover a financial indicator that determines how quickly a business can turn its inventory into sales

inventory write-down a general journal entry used to reduce the value of an item of inventory from its cost price

invoice a document that shows the creation of a debt when a credit transaction has taken place

just-in-time ordering purchasing inventory so that the new order of goods arrives just before the business runs out of inventory

ledger account a financial record for all details of a particular item

liabilities obligations to transfer economic resources to another entity

liability approach a method of accounting where the initial receipt of revenue is treated as a liability, with a subsequent transfer of the amount earned to a revenue account

liquidity the ability of a business to meet its short-term debts as they fall due

loss on disposal of asset the difference between the carrying value of an asset and the proceeds from the disposal of the asset, where the proceeds are less than the carrying value

memo a note used to record an internal transaction

negative variance – *see* unfavourable variance

net loss the result when the expenses for a period exceed the revenue for the same period

net profit the result when revenues exceed expenses for a reporting period

net profit margin (net profit/sales) the percentage of the sales dollar that remains after all expenses have been taken into account

net realisable value (NRV) the estimated selling price of an item of inventory, less any costs incurred in its selling, marketing or distribution

opening journal entry a general journal entry made on the first day of business, or on the first day of a double entry recording system being established

order form a business document that requests goods or services from a supplier

over-depreciation a situation where a non-current asset has been depreciated too much due to under-estimation of either its useful life or its residual value, leading to a profit on disposal

owner's equity the residual interest an owner has in a business after liabilities are deducted from assets

performance report – *see* variance report

period assumption financial activities are recorded and reported on for a particular period of time

period cost a cost written off as an expense for the reporting period

perpetual inventory a system of inventory record keeping in which movements of inventory items are recorded on a continuous basis throughout a reporting period

physical stocktake the process of counting units of inventory on hand at a particular point in time

positive variance – *see* favourable variance

prepaid expenses expenses paid during a period but not yet used

proceeds from disposal of asset the amount of cash received, or the trade-in value granted, on the disposal of a non-current asset

product cost any cost added to the cost price of a unit of inventory

Profit and Loss (P&L) Summary

account the general ledger account that summarises all revenues and expenses for a reporting period in order to determine the profit or loss for that period

profit on disposal of asset the difference between the carrying value of an asset and the proceeds from its disposal, where the proceeds are greater than the carrying value

profitability a comparison of the profit earned with a base figure, such as assets employed, capital invested or sales made

purchases return the return of goods by a business to its supplier (accounts payable)

quick asset ratio a measure of immediate liquidity

quotation a business document that provides a potential customer with a cost estimate for goods or services

reducing balance method a method of depreciation that allocates more depreciation in the early years of an asset's life and less depreciation in its later years

relevance usefulness of financial information in helping users to make decisions

residual value the amount an asset is expected to realise at the end of its useful life when it is sold, traded in or scrapped

return on assets a financial indicator that compares net profit with the total assets of the business; how well management has used its investment in assets to earn profit

return on owner's investment a financial indicator that compares net profit with the capital invested by the owner; the return earned on the investment of funds by the proprietor of a business

revenues increases in assets, or decreases in liabilities, that result in an increase in owner's equity

sales budget a report that includes estimates of all sales for a future reporting period

sales return the return of goods by a customer (accounts receivable) to a business

schedule of collections a table used by businesses that sell on credit to predict cash inflows from accounts receivable

schedule of payments a table used by businesses that purchase inventory on credit to help predict cash outflows to accounts payable

source documents business documents that are the source of financial data

statement of account a business document issued to credit customers, summarising transactions between the customer and the supplier

straight-line method of depreciation a method of depreciation that allocates the same amount of depreciation every reporting period, regardless of the age of the asset

tax invoice business document used to provide evidence of transactions that include GST

timeliness providing information to users as quickly as possible so that it remains useful for decision-making

trend analysis measuring the change in a financial item or an indicator over several periods

trial balance a list of general ledger accounts with their balances; used to check that the total value of all debits equals the value of all credits

under-depreciation a situation where a non-current asset hasn't been depreciated enough due to over-estimation of either its useful life or its residual value, leading to a loss on disposal

understandability presenting financial information clearly and concisely so that users can easily understand it

unearned revenue revenue that has been received in advance but not yet earned

unfavourable variance (or negative variance) a situation in which the actual result is worse than the result predicted in the budget

useful life the period of time that a business expects to use a non-current asset for the purpose of earning revenue

variance the difference between a budget prediction and an actual result

variance report (or performance report) an accounting report that compares budget predictions with the actual results achieved

verifiability the premise that financial information is supported by evidence that can be used to check its accuracy

vertical analysis the breakdown of an accounting report into percentages in a vertical fashion on the page

working capital the liquidity of a business, expressed in dollars

working capital ratio a measure of the liquidity of a business, expressed as a ratio or percentage

Selected solutions

UNIT 3

Chapter 2

- 3 Balance sheet \$111 800
- 4 Balance sheet \$827 680
- 5 Balance sheet \$1 604 000
- 7 Balance sheet \$143 490
- 8 Final balance sheet \$108 200
- 9 Final balance sheet \$137 240
- 10 Balance sheet \$95 610
- CASE STUDY** Balance sheet \$59 880

Chapter 5

- 2 Bank balance \$25 073
- 3 Bank balance \$120 360
Trial balance \$187 700
- 4 Trial balance \$779 800
- 5 GST Clearing balance \$1830 Cr
- 8 Trial balance \$32 619
- 9 Trial balance \$63 845
Balance sheet \$58 915
- 10 Trial balance \$98 526
Balance sheet \$91 616
- CASE STUDY** Trial balance \$291 933

Chapter 6

- 1 Capital \$94 000
- 2 Balance sheet \$127 000
- 3 Capital \$39 100
- 4 Capital \$45 700

Chapter 7

- 1 Inventory \$3835
- 2 Inventory \$4113.50
- 5 Cost of sales: Identified Cost \$36 235
Cost of sales: FIFO \$36 170
- 6 Trial balance \$624 170
- 9 Inventory gain \$220
- 10 Inventory balance: Identified Cost \$2180
Inventory balance: FIFO \$2240
- 11 Inventory balance: Identified Cost \$348
Inventory balance: FIFO \$352
- 14 Inventory balance \$4920
- 15 Inventory balance \$20 680
- 16 Inventory balance \$9005

Chapter 8

- 9 Inventory balance \$40 780
- 10 Inventory card balance \$472
- 11 Inventory card balance \$542
- 12 Inventory card balance \$3505
- 13 Identified cost balance \$4980
FIFO balance \$5040
- 14 Inventory card balance \$330

Chapter 9

- 5 Inventory write-down \$6000
- 6 Inventory write-down \$1200
- 7 Inventory write-down \$540
- CASE STUDY** Inventory write-down \$1600

Chapter 10

- 1 Net profit \$11 000
- 2 Net profit \$7390
- 3 Net profit \$32 050
- 4 Net profit \$29 070
Balance sheet \$458 670
- 5 Net loss \$7330
Balance sheet \$85 370
- 6 Net profit \$39 120
Balance sheet \$738 440

Chapter 11

- 1 Net profit \$23 400
- 2 Net profit \$56 000
- 3 Net profit \$12 300
Balance sheet \$72 000
- 4 Net profit \$23 300
Balance sheet \$118 080
- 5 Net profit \$30 840
- 6 Net profit \$9100
- 7 Net profit \$22 250
Balance sheet \$972 930
- CASE STUDY** Net profit \$23 360
Balance sheet \$339 800

Chapter 13

- 1 Bad debts expense \$600
- 2 Bad debts expense \$575
- 7 Bad debts expense \$800
- 8 Bad debts expense \$6910
- 9 Bad debts expense 2027: \$2 040; 2028: \$260
- 10 Bad debts expense \$1220
- 11 Bad debts expense 2028: \$1755; 2029: \$1780

UNIT 4

Chapter 15

- 1 Depreciation p.a. \$4000
- 2 Depreciation p.a. \$1300
- 3 Depreciation p.a. \$3600
- 4 Depreciation p.a. \$2400
- 5 Depreciation p.a. \$1080
- 6 Depreciation p.a. \$5000
- 7 Depreciation p.a. \$6720
- 8 Depreciation p.a. \$2800

Chapter 16

- 1 Carrying value after 3 years
SLM: \$4800
RBM: \$4116
- 2 Carrying value after 3 years
SLM: \$13 020
RBM: \$10 125
- 3 Carrying value 31/7/2030: \$8064
- 4 Carrying value 31/12/2030: \$16 875
- 5 Carrying value after 4 years
SLM: \$8400
RBM: \$8163

Chapter 17

- 3 Loss on disposal \$1300
- 4 Profit on disposal \$300
- 5 Profit on disposal \$1019
- 6 Loss on disposal \$1500
- 7 Loss on disposal \$6944
- 8 Loss on disposal \$1517

CASE STUDY Depreciation expense
2028: \$3562
2029: \$8400
2030: \$8473

Chapter 14

- 1 Cash flows: Operating \$26 300
 - 2 Cash flows: Operating \$23 200
 - 3 Cash flows: Investing (\$1700)
 - 4 Cash flows: Investing (\$13 500)
 - 5 Cash flows: Financing (\$23 000)
 - 6 Cash flows: Financing \$98 000
 - 7 Net increase in cash \$15 506
 - 8 Net increase in cash \$9263
 - 9 Net increase in cash (\$6804)
 - 10 Net increase in cash \$12 150
- CASE STUDY** Net profit \$560
Increase in cash \$1361

Chapter 18

- 1 Net profit \$1800
 - 2 Net profit \$8140
 - 3 Net profit \$9700
 - 10 Net loss (\$28 600)
 - 11 Net loss (\$52 570)
 - 12 Net loss (\$41 279)
- CASE STUDY** Balance sheet \$407 530

Chapter 19

CASE STUDY Net profit \$1200

Chapter 20

- 1 Collections: Acct Rec in July \$9620
- 2 Collections: Acct Rec in October \$5282
- 3 Payments: Acct Pay in July \$6623
- 4 Collections: Acct Rec in April \$5194
Payments: Acct Pay in April \$6581
- 5 Cash received Acct Rec \$5255
- 6 Net increase in Cash (\$1126)
- 7 Net increase in Cash in Oct \$648
- 8 Gross profit \$43 000
- 9 Payments to Acct Pay \$11 780
- 10 Net increase in Cash (\$9490)
- 11 Net profit \$2318
Net increase in Cash \$4755
- 12 Net increase in Cash (\$4588)
Budgeted net loss (\$1052)

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