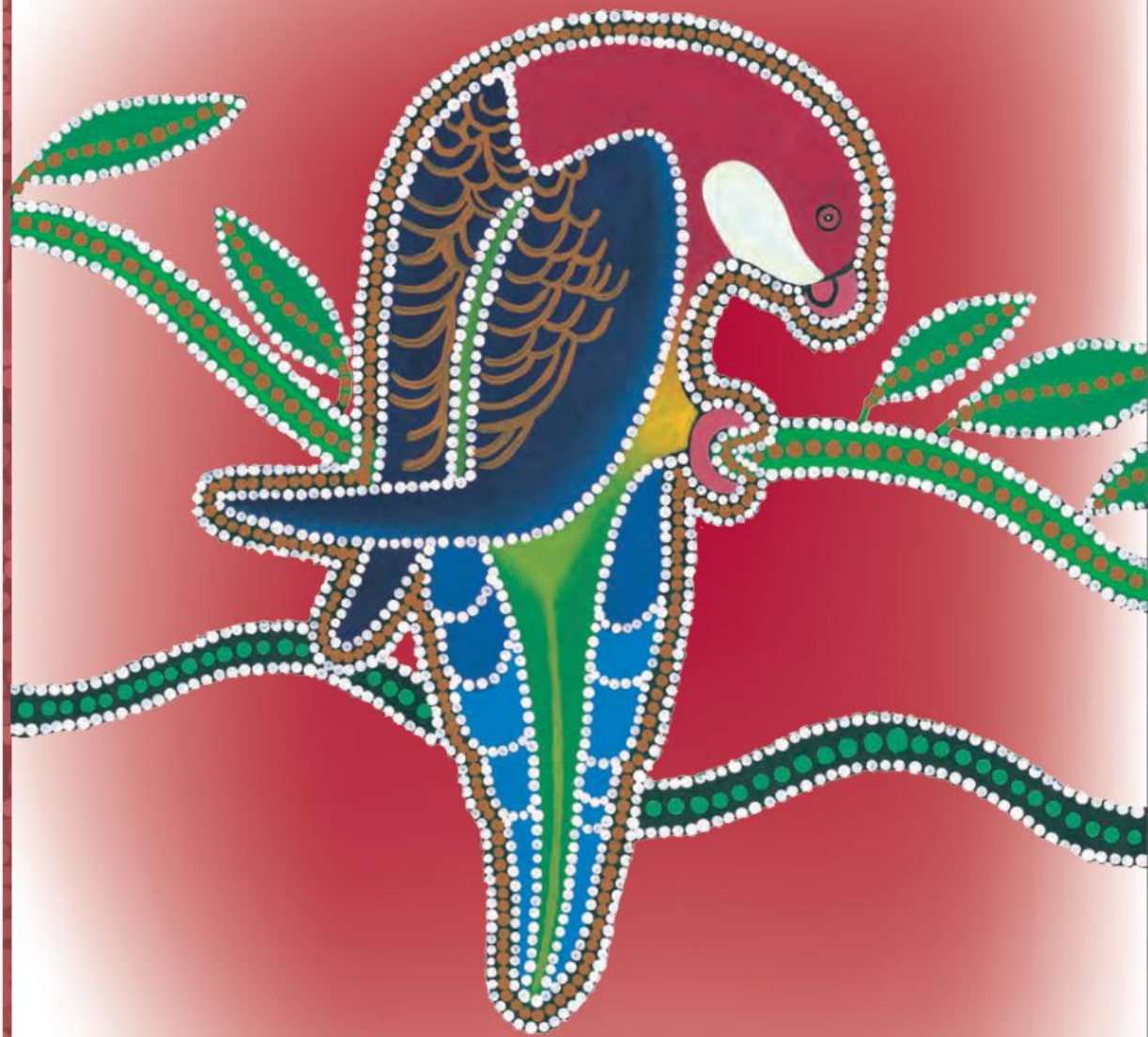
sixth edition

MATHS MATE

RED



J. B. Wright & I. Tutos

MATHS MATE

Student e-Book - 6th Edition

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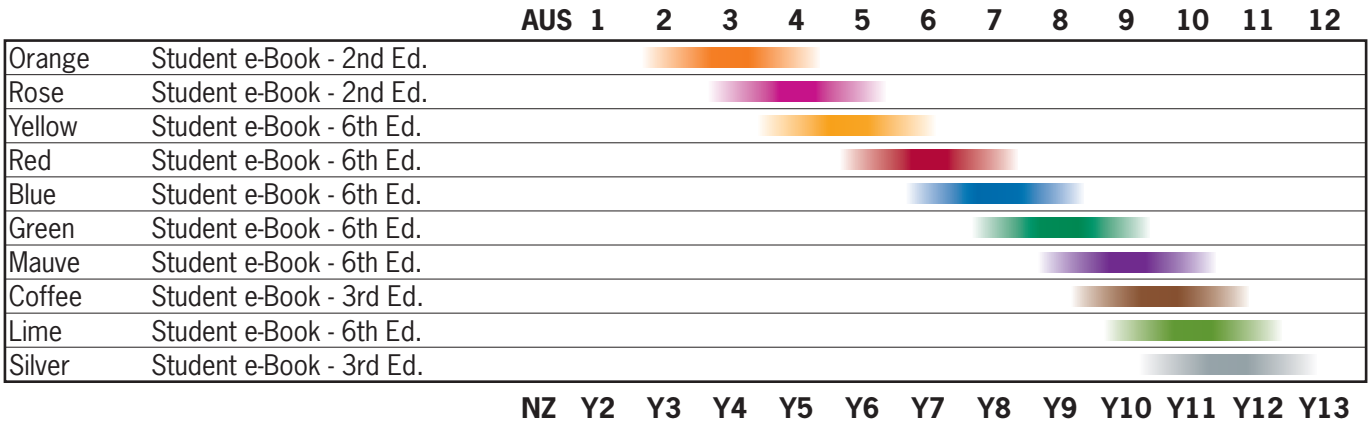
Preface

The Maths Mate Review Program is designed to be used in schools by students from years 3 to 10 (Australia) and years 4 to 11 (New Zealand). Emphasis is placed on the review and gradual development of basic skills.

It is not expected that all students will be able to complete every question from week one. Some questions have been designed to offer a real challenge. However, a major strength of the program is that students are consistently confronted with problems relating to their understanding of the same basic skill, encouraging them to see the need to master that skill in order to progress.

RECOMMENDED GRADE / YEAR LEVEL INDICATOR



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Maths Mate Red cover painting

Rosella - 2003
Acrylic on canvas 60 × 50 cm
by Australian artist Susan Betts - Kokata, Mirning and Wirangu.

'Rosella' was purchased by The Educational Advantage who have been kindly given permission to reproduce the painting. This contemporary Aboriginal artwork combines traditional and modern techniques. Susan's rich and vibrant art reflects the Australian landscape and wildlife, both flora and fauna.

MATHS MATE

Name: .....

Class: .....

Teacher: .....

Worksheet Results

Term 1

		Sheet 1	Sheet 2	Sheet 3	Sheet 4	Skill Builder links	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Skill Builder links
NUMBER & ALGEBRA	1. [+ Whole Numbers to 10]	1	1	1	1	1.1,2,3,4	1	1	1	1	1.1,2,3,4
	2. [– Whole Numbers to 10]	2	2	2	2	2.1,2,3,4,5	2	2	2	2	2.1,2,3,4,5
	3. [× Whole Numbers to 10]	3	3	3	3	3.3,4,5	3	3	3	3	3.1,2,3,4
	4. [÷ Whole Numbers to 10]	4	4	4	4	4.1,2	4	4	4	4	4.1,2
	5. [Large Number +]	5	5	5	5	5.1	5	5	5	5	5.1
	6. [Large Number –]	6	6	6	6	6.1	6	6	6	6	6.1
	7. [Powers of 10 ×,÷]	7	7	7	7	7.1,2	7	7	7	7	7.3,4
	8. [Large Number ×,÷]	8	8	8	8	8.1,2	8	8	8	8	8.4
	9. [Decimals]	9	9	9	9	9.2	9	9	9	9	9.4,6
	10. [Fractions]	10	10	10	10	10.1,2	10	10	10	10	10.11
	11. [Dec. / Frac. / Percentages]	11	11	11	11	11.5	11	11	11	11	11.3,4
	12. [Place Value]	12	12	12	12	12.1	12	12	12	12	12.2
	13. [Operations]	13	13	13	13	13.1,2	13	13	13	13	13.3,4
	14. [Exploring Numbers]	14	14	14	14	14.1	14	14	14	14	14.3,4,11
	15. [Number Patterns / Equations]	15	15	15	15	15.1,3	15	15	15	15	15.2,4
MEASUREMENT & SPACE	16. [Units of Measurement]	16	16	16	16	16.1,2	16	16	16	16	16.3
	17. [Measuring]	17	17	17	17	17.1,2	17	17	17	17	17.4
	18. [Perimeter / Area]	18	18	18	18	18.2	18	18	18	18	18.3
	19. [Shapes]	19	19	19	19	19.2	19	19	19	19	19.3
	20. [Location / Transformation]	20	20	20	20	20.2	20	20	20	20	20.3,10
S & P	21. [Statistics / Probability]	21	21	21	21	21.2	21	21	21	21	21.3,4
PROBLEM SOLVING	22. [Problem Solving 1]	22	22	22	22	Hints & Solutions	22	22	22	22	Hints & Solutions
	23. [Problem Solving 2]	23	23	23	23	Hints & Solutions	23	23	23	23	Hints & Solutions
	24. [Problem Solving 3]	24	24	24	24	Hints & Solutions	24	24	24	24	Hints & Solutions
	Total Correct										

MATHS MATE

Term 1 - Sheet 1

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	3	10	7	1	4	2	9	8	5	6
+ 3										

2. [– Whole Numbers to 10]

	7	14	15	13	11	9	8	12	6	10
– 5										

3. [× Whole Numbers to 10]

	4	1	3	9	10	5	8	2	6	7
× 4										

4. [÷ Whole Numbers to 10]

	2	9	10	8	6	4	3	7	1	5
÷ 1										

DIVIDING BY 5

Here is an easy way to divide by 5:

Double the number and then divide by 10.

e.g. 1) $1230 \div 5 = 246$

$1230 \times 2 = 2460$
$2460 \div 10 = 246$

e.g. 2) $288 \div 5 = 57.6$

$288 \times 2 = 576$
$576 \div 10 = 57.6$

CHALLENGE:

You'll find this little Mate ☺ on every sheet but one! The question is which one?

5. [Large Number +]

$$\begin{array}{r} 56 \\ +\ 23 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 56 \\ -\ 23 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 26 \\ \times\ 10 \\ \hline \square \end{array}$$

8. [Large Number ×,÷]

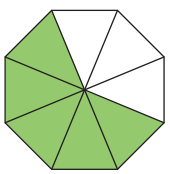
$$\begin{array}{r} 243 \\ \times\ \ 2 \\ \hline \square \end{array}$$

9. [Decimals]

Write as a decimal:
nine tenths.

10. [Fractions]

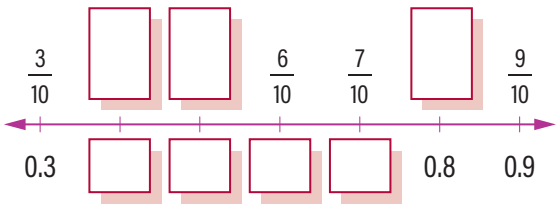
What fraction of this octagon is shaded?



–

11. [Decimals / Fractions / Percentages]

Complete the number line.



12. [Place Value]

Which digit in 8526 is in the same place as the 3 in 934?

13. [Operations]

$8 + \square = 11 + 8$

14. [Exploring Numbers]

Write in numerals:
one thousand, two hundred and seven

15. [Number Patterns / Equations]

16, 13, 10, 7, __ , __

16. [Units of Measurement]

Choose the appropriate unit: grams, kilograms or tonnes.

"Ten oranges would weigh about 2..."

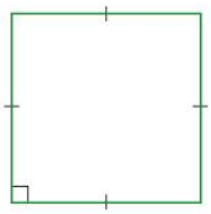
17. [Measuring]

Estimate the length of the pencil.

mm

18. [Perimeter / Area] *

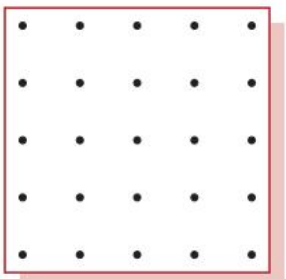
Using a ruler, measure the side length of the square in millimetres. What is the perimeter of the square?



mm

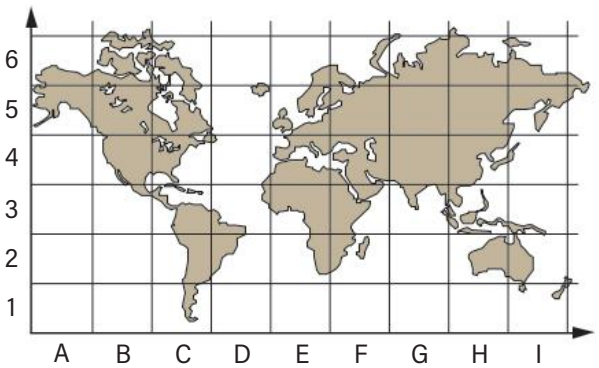
19. [Shapes]

Draw a rectangle on the dotted grid. Make sure that all the vertices are on a dot.



20. [Location / Transformation]

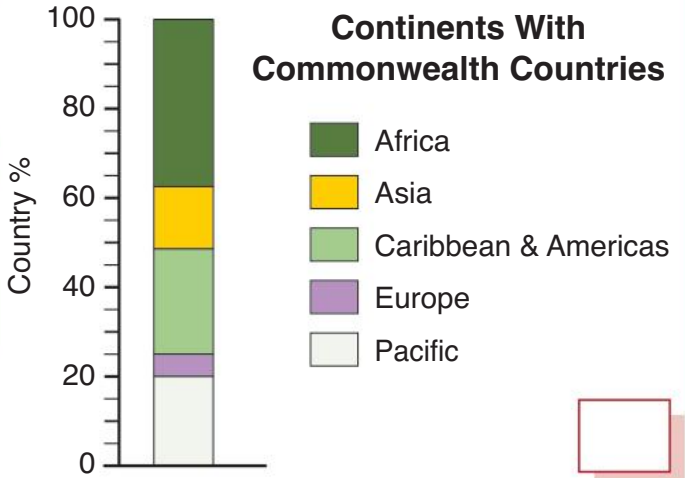
Which continent would you be in, if you were at G5 on this map?



21. [Statistics / Probability]

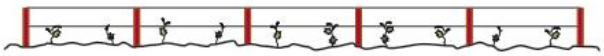
There are 56 independent countries in the Commonwealth. The percentage of these countries located in Africa is closest to:

A 60% B 50% C 40% D 30%



22. [Problem Solving 1] *

Ragan takes an hour to plant 2 vines between each of the 6 posts in the first row of his vineyard. How long will it take to plant 2 vines between each of the 9 posts in the longer second row?

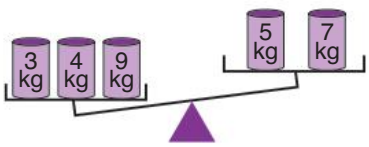


[Hint: 10 vines take one hour.]

min

23. [Problem Solving 2] *

Which two weights need to be swapped to balance the scales?



kg and kg

24. [Problem Solving 3]

Fill in the missing digits, given that no digit is repeated.

$$\begin{array}{r} 2\ \square\ 4 \\ +\ \square\ 1\ \square \\ \hline 9\ \square\ 0 \end{array}$$

MATHS MATE

Term 1 - Sheet 2

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	4	8	5	7	1	6	2	3	10	9
+ 6										

2. [– Whole Numbers to 10]

	18	13	12	16	11	14	17	9	15	10
– 8										

3. [× Whole Numbers to 10]

	9	10	4	5	2	3	7	6	8	1
× 7										

4. [÷ Whole Numbers to 10]

	6	42	36	18	24	48	30	60	54	12
÷ 6										

MULTIPLYING BY 25

To multiply by 25 you can multiply by 100 and then divide by 4.

e.g. $32 \times 25 = 800$

$32 \times 100 = 3200$
$3200 \div 4$
$= 1600 \div 2$
$= 800$

Try your skill:

24×25
444×25
18×25

Answers: 600, 11 100, 450

5. [Large Number +]

$$\begin{array}{r} 257 \\ +\ 232 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 849 \\ -\ 333 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 183 \\ \times\ 10 \\ \hline \square \end{array}$$

8. [Large Number ×,÷]

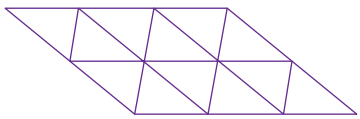
$$\begin{array}{r} 210 \\ \times\ 4 \\ \hline \square \end{array}$$

9. [Decimals]

Write as a decimal:
two and eleven hundredths. ☐

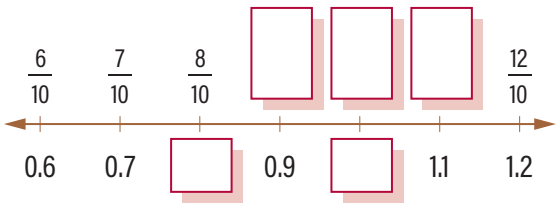
10. [Fractions]

Shade in $\frac{1}{6}$ of this parallelogram.



11. [Decimals / Fractions / Percentages]

Complete the number line.



12. [Place Value]

Which digit in 4257 is in the tens place? ☐

13. [Operations]

☐ + 13 = 13 + 21

14. [Exploring Numbers]

Write in numerals:
three thousand, five hundred and forty ☐

15. [Number Patterns / Equations]

2, 9, 16, 23, 30, ☐, ☐

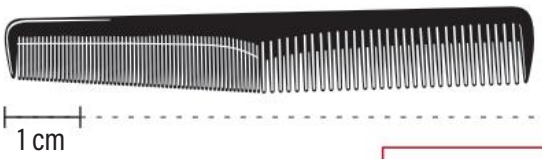
16. [Units of Measurement]

Choose the appropriate unit: millimetres, centimetres or metres.

"The height of Keops Pyramid in Egypt is 137..."

17. [Measuring]

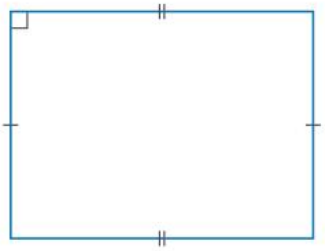
Estimate the length of the comb.



cm

18. [Perimeter / Area] *

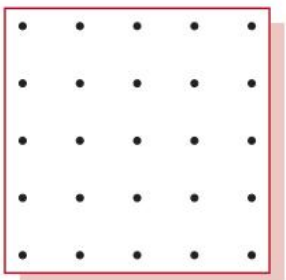
Using a ruler, measure the side lengths of the rectangle in centimetres. What is the perimeter of the rectangle?



cm

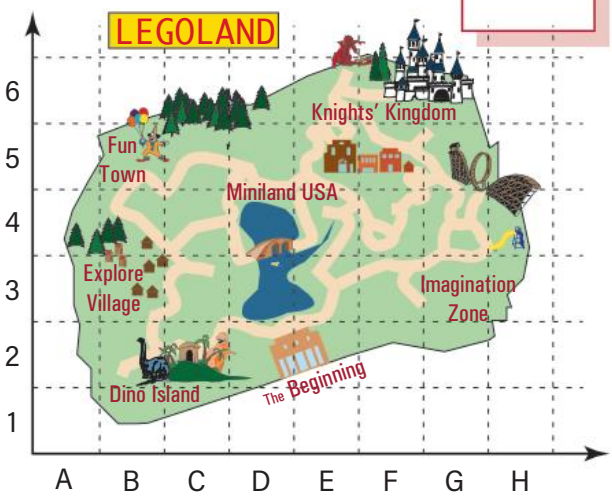
19. [Shapes]

Draw a kite on the dotted grid. Make sure that all the vertices are on a dot.



20. [Location / Transformation]

Which grid reference describes the location of Fun Town?



21. [Statistics / Probability]

What percentage of the composition of the 787 Dreamliner is steel?

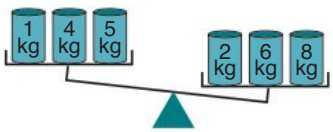
Composition of the Boeing 787 Dreamliner

22. [Problem Solving 1] *

For hurdles races, the hurdles are placed 10 m apart. For example, a 60 m race has 5 hurdles. How many hurdles are required for a 100 m race?

23. [Problem Solving 2] *

Which two weights need to be swapped to balance the scales?



kg and kg

24. [Problem Solving 3]

Fill in the missing digits, given that no digit is repeated.

$$\begin{array}{r} 1\square 7 \\ +\ 4\ 8\square \\ \hline \square\square 9 \end{array}$$

MATHS MATE

Term 1 - Sheet 3

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	9	7	8	6	5	3	4	1	2	10
+ 10										

2. [– Whole Numbers to 10]

	11	6	8	5	12	13	4	9	10	7
– 3										

3. [× Whole Numbers to 10]

	10	6	4	5	2	1	7	3	8	9
× 1										

4. [÷ Whole Numbers to 10]

	80	32	56	64	40	72	48	16	8	24
÷ 8										

MULTIPLYING BY 9

Here is an easy way to multiply a number by 9:

Multiply by 10 instead, and then just subtract the original number.

e.g. $45 \times 9 = 405$

$45 \times 10 = 450$

$450 - 45 = 405$

Try your skill:

23×9

34×9

28×9

Answers: 207, 306, 252

5. [Large Number +]

$$\begin{array}{r} 7623 \\ +\ 1074 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 976 \\ -\ 733 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 57 \\ \times\ 100 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 36 \\ \times\ 6 \\ \hline \end{array}$$

9. [Decimals]

Write as a decimal:

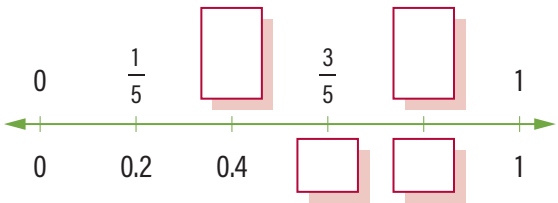
five and two tenths.

10. [Fractions]

Mark $\frac{3}{4}$ with an arrow and $\frac{1}{2}$ with a star on the number line.

11. [Decimals / Fractions / Percentages]

Complete the number line.



12. [Place Value]

Which digit in 24.38 is in the hundredths place?

13. [Operations]

$\square \times 4 = 4 \times 15$

14. [Exploring Numbers]

Write in numerals:

nine thousand and ninety-nine

15. [Number Patterns / Equations]

9, 18, 27, 36, 45, __ , __

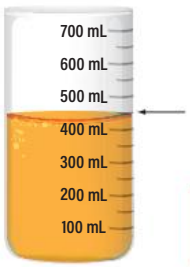
16. [Units of Measurement]

How many of these objects are likely to have a capacity greater than 1 litre?

A teacup ☐
A bucket ☐
A medicine bottle ☐
A large jug ☐

17. [Measuring]

How much solution is in the measuring cylinder?



mL

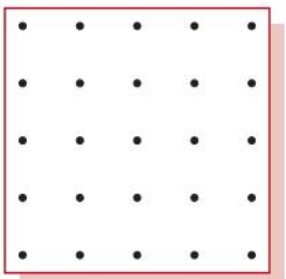
18. [Perimeter / Area] *

Using a ruler, measure the side lengths of the rectangle in centimetres. What is the perimeter of the rectangle?

cm

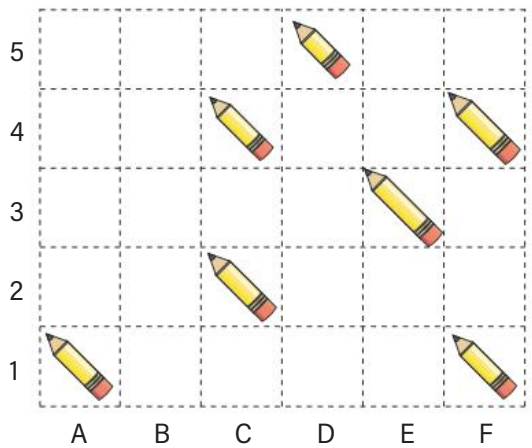
19. [Shapes]

Draw a right-angled triangle with two equal sides on the dotted grid.
Make sure that all the vertices are on a dot.



20. [Location / Transformation]

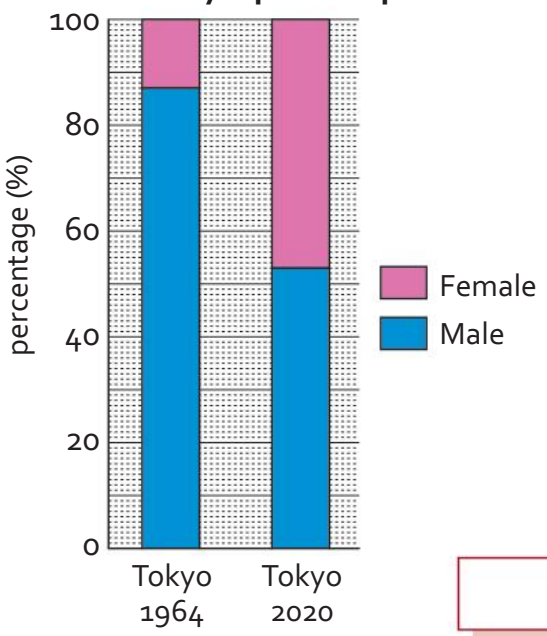
The shortest pencil is at D5. Find the grid reference of the longest pencil.



21. [Statistics / Probability]

What percentage of competitors at the 2020 Tokyo Olympics were female?

Gender of Olympic Competitors



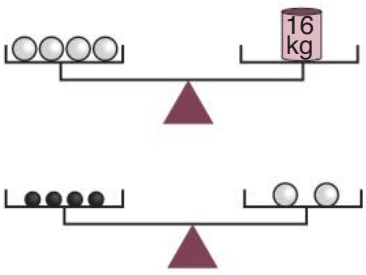
22. [Problem Solving 1] *

If it takes Sarah twelve minutes to saw a pole into three pieces, how long would it take her to saw a pole into five pieces?

min

23. [Problem Solving 2] *

Use the diagrams to calculate the weight of one black sphere.



kg

24. [Problem Solving 3]

Fill in the missing digits, given that no digit is repeated.

$$\begin{array}{r} 2\ 0\ \square \\ +\ \square\ \square\ 5 \\ \hline \square\ 8\ \square \end{array}$$

MATHS MATE

Term 1 - Sheet 4

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	7	5	6	4	1	8	2	9	10	3
+ 8										

2. [– Whole Numbers to 10]

	13	11	9	14	15	16	17	12	10	8
– 7										

3. [× Whole Numbers to 10]

	7	5	6	4	1	8	2	9	10	3
× 6										

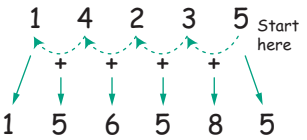
4. [÷ Whole Numbers to 10]

	56	21	35	14	63	70	7	42	49	28
÷ 7										

MULTIPLYING BY 11

Find the answer to multiplications like $14\,235 \times 11 = 156\,585$ easily.

- Write down the right hand digit, in this case 5.
- Add the digits in pairs, starting from the right.
- To finish, write down the left hand digit, in this case 1.



Try your skill:

2345×11

$38\,234 \times 11$

Answers: 25 795, 420 574

5. [Large Number +]

$$\begin{array}{r} 313 \\ 225 \\ 101 \\ +\ \ 20 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 5182 \\ -\,4041 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 65 \\ \times 1000 \\ \hline \square \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 94 \\ \times\ \ 9 \\ \hline \square \end{array}$$

9. [Decimals]

Write as a decimal:

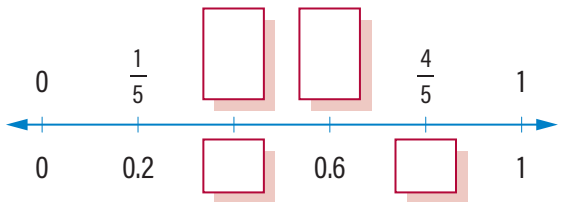
sixty-three hundredths.

10. [Fractions]

Mark $\frac{2}{3}$ with a circle and $\frac{1}{2}$ with a cross on the number line.

11. [Decimals / Fractions / Percentages]

Complete the number line.



12. [Place Value]

Which digit in 456.2 is in the same place as the 9 in 9.78?

13. [Operations]

$10 \times 9 = \square \times 10$

14. [Exploring Numbers]

Write in numerals:

eight thousand and one

15. [Number Patterns / Equations]

48, 40, 32, 24, __ , __

16. [Units of Measurement]

How many of these objects are likely to have a mass less than 1 kilogram?

A car tyre ☐
A coffee table ☐
A mushroom ☐
A cup of hot chocolate ☐

☐

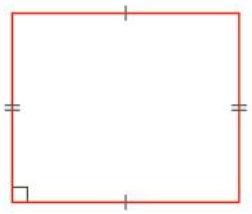
17. [Measuring]

What is the weight of the fish?

kg

18. [Perimeter / Area] *

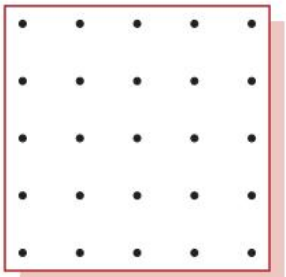
Using a ruler, measure the side lengths of the rectangle in millimetres. What is the perimeter of the rectangle?



mm

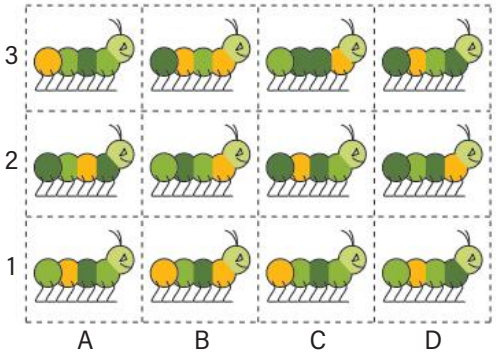
19. [Shapes]

Draw a parallelogram on the dotted grid. Make sure that all the vertices are on a dot.



20. [Location / Transformation]

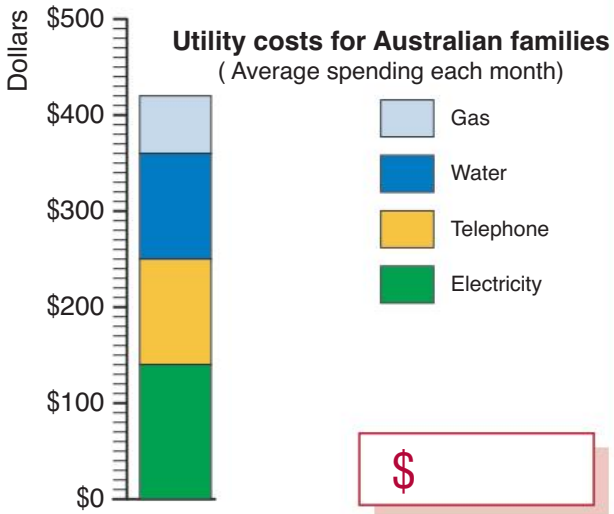
Find the grid references of the two identical caterpillars.



and

21. [Statistics / Probability]

What is the combined average monthly cost of water and gas per family?



$

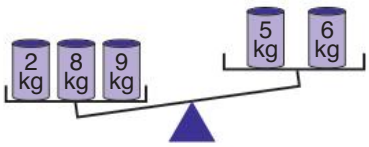
22. [Problem Solving 1] *

Outside Kaitlan's front gate there is a power pole. Along the street there are many more poles all evenly spaced. Starting at the first pole Kaitlan takes 30 seconds to jog to pole three. At this rate, how long will it take her to reach pole six?

s

23. [Problem Solving 2] *

Which two weights need to be swapped to balance the scales?



kg and kg

24. [Problem Solving 3]

Fill in the missing digits, given that no digit is repeated.

☐☐☐
\+ 8 0 7
☐ 5 ☐

MATHS MATE

Term 1 - Sheet 5

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	10	6	4	5	2	1	7	3	8	9
+ 2										

2. [– Whole Numbers to 10]

	15	12	11	20	13	17	16	14	19	18
– 10										

3. [× Whole Numbers to 10]

	6	2	1	3	10	4	7	8	5	9
× 3										

4. [÷ Whole Numbers to 10]

	4	32	36	12	28	24	20	40	16	8
÷ 4										

UTC

The world is divided into 24 time zones. Travelling eastward, you must put your watch forward one hour as you pass into new time zones. As you move westward, you put your watch back one hour per zone. The 0° meridian of longitude runs through the town of Greenwich in England. The standard time common to every place in the world is now called the **Coordinated Universal Time (UTC)**, which replaced the old Greenwich Mean Time **(GMT)**.

5. [Large Number +]

$$\begin{array}{r} 49 \\ +\ 38 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 42 \\ -\ 14 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$80 \div 10 =$ ☐

8. [Large Number ×,÷]

☐

$2\overline{)800}$

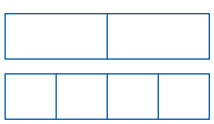
9. [Decimals]

Write these cents in dollars:

5¢ = $ ☐

10. [Fractions]

Shade the fraction bars to show $\frac{1}{2}$ and $\frac{3}{4}$. Which fraction is greater?



☐

11. [Decimals / Fractions / Percentages]

Write $\frac{8}{100}$ as a decimal.

☐

12. [Place Value]

What is the value of the digit 6 in the number 2670?

☐

13. [Operations]

Which expression equals 5?

A 0×5

B $0 + 5$

C $0 - 5$

☐

14. [Exploring Numbers]

Write the number 319 in words.

☐

15. [Number Patterns / Equations]

☐ + 9 = 15

16. [Units of Measurement]

Convert to centimetres:

4 m = ____ cm

17. [Measuring]

What time in the afternoon is shown on this clock?

i) 12-hour time format (am or pm):

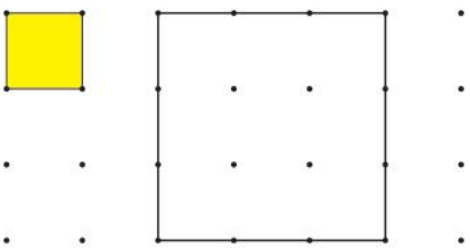
____ : ____

ii) 24-hour time format:

____ : ____

18. [Perimeter / Area]

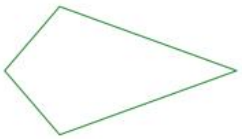
How many small squares are needed to cover the larger square?



____

19. [Shapes]

How many sides does a kite have?



____

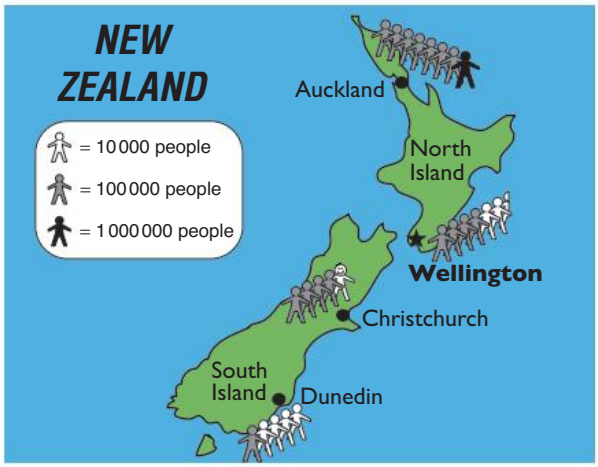
20. [Location / Transformation]

Draw the lines of symmetry through this rectangle. How many lines of symmetry does this rectangle have?

____

21. [Statistics / Probability]

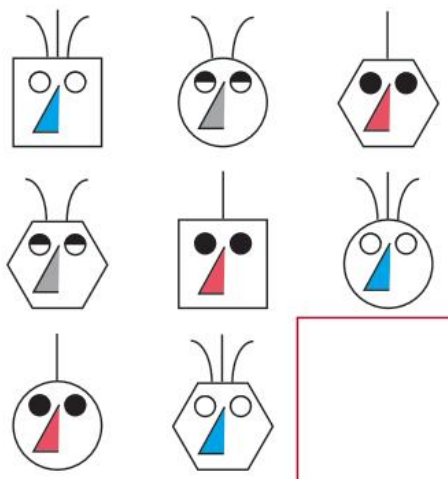
What was the population of Christchurch in 2024?



____

22. [Problem Solving 1]

Draw the missing face.



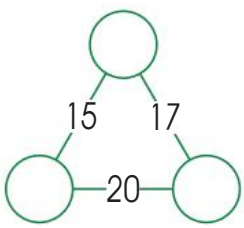
23. [Problem Solving 2] *

A teacher spent $64 buying two types of games. One type cost $12 each and the other $14 each. How many of the $12 games did she buy?

____

24. [Problem Solving 3]

Enter numbers in the circles so that the numbers on each line equal the sum of the numbers at each end.



MATHS MATE

Term 1 - Sheet 6

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	3	10	7	1	4	2	9	8	5	6
+ 8										

2. [– Whole Numbers to 10]

	4	11	12	6	10	9	8	13	7	5
– 3										

3. [× Whole Numbers to 10]

	3	6	9	1	7	2	10	5	4	8
× 5										

4. [÷ Whole Numbers to 10]

	24	15	3	30	27	21	9	12	6	18
÷ 3										

DATE LINE

The **International Date Line** is an imaginary line running north-south down through the Pacific Ocean following the 180° east line of longitude. (This makes it directly opposite Greenwich, England.)

Move westward across the International Date Line and you move forward one day.
i.e. Sunday becomes Monday.

Move eastward and you gain a day.
i.e. Monday becomes Sunday.

5. [Large Number +]

$$\begin{array}{r} 3\,2 \\ 1\,5 \\ +\,1\,4 \\ \hline \square \end{array}$$

6. [Large Number ☺]

$$\begin{array}{r} 7\,3 \\ -\,2\,5 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

340 ÷ 10 = ☐

8. [Large Number ×,÷]

$$2\overline{)2442} \quad \square$$

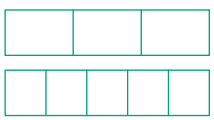
9. [Decimals]

Write these cents in dollars:

105¢ = $ ☐

10. [Fractions]

Shade the fraction bars to show $\frac{2}{3}$ and $\frac{3}{5}$. Which fraction is greater?



☐

11. [Decimals / Fractions / Percentages]

Write $\frac{3}{1000}$ as a decimal. ☐

12. [Place Value]

What is the value of the digit 7 in the number 437.92? ☐

13. [Operations]

3 × ☐ = 3

14. [Exploring Numbers]

Write the number 2006 in words.

☐

15. [Number Patterns / Equations]

13 + ☐ = 24

16. [Units of Measurement]

Convert to centimetres:

300 mm = ____ cm

17. [Measuring]

What time in the evening is shown on this watch?

i) 12-hour time format (am or pm):

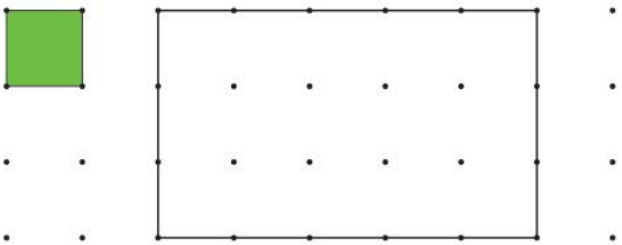
____ : ____

ii) 24-hour time format:

____ : ____

18. [Perimeter / Area]

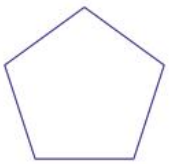
How many small squares are needed to cover the rectangle?



____

19. [Shapes]

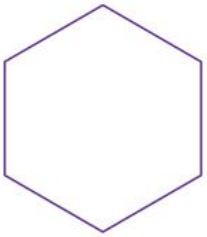
How many interior angles does a pentagon have?



____

20. [Location / Transformation]

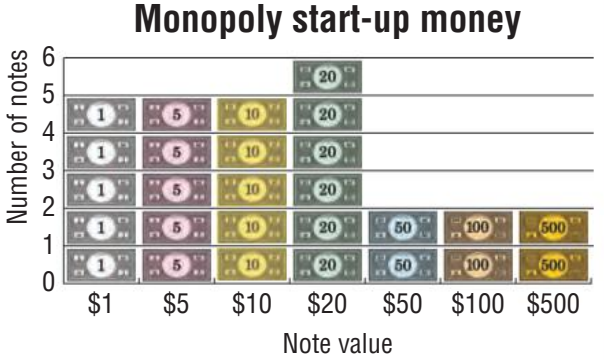
Draw the lines of symmetry through this regular hexagon. How many lines of symmetry does this hexagon have?



____

21. [Statistics / Probability]

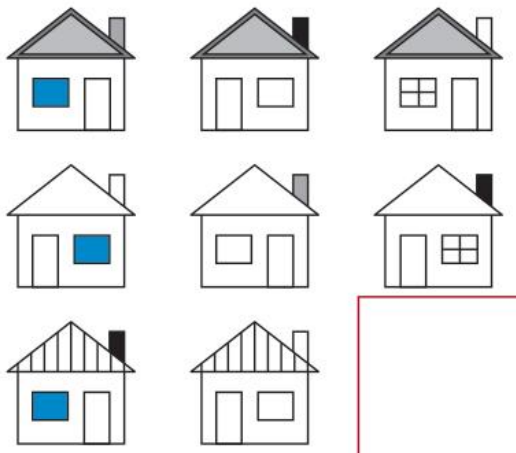
How much Monopoly money do you get at the start of the game?



$ ____

22. [Problem Solving 1]

Draw the missing house.



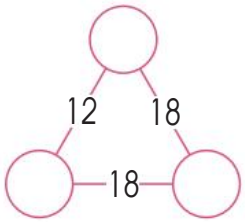
23. [Problem Solving 2] *

Jo spent $53 on tulips and orchids. The tulips cost $6 each and the orchids cost $7 each. If she bought 8 flowers in all, how many tulips did she buy?

____

24. [Problem Solving 3]

Enter numbers in the circles so that the numbers on each line equal the sum of the numbers at each end.



MATHS MATE

Term 1 - Sheet 7

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	9	10	1	6	7	4	8	3	5	2
+ 7										

2. [– Whole Numbers to 10]

	15	13	11	16	17	18	19	14	12	10
– 9										

3. [× Whole Numbers to 10]

	7	2	8	9	6	10	4	1	3	5
× 2										

4. [÷ Whole Numbers to 10]

	45	18	9	90	27	63	54	36	81	72
÷ 9										

LEAP YEARS

Most years have 365 days. Since the true length of a year is about 365 days, 5 hours and 49 minutes we have to add an extra day to some years.
Every four years the extra hours almost add to a full day. That is why after every four years an extra day is usually included.

Are we in a leap year?

If the last two digits of a given year e.g. 2020 can be evenly divided by 4, then the year is a leap year.
For a century year, e.g. 2000, the first two digits must be evenly divided by 4.

5. [Large Number +]

$$\begin{array}{r} 1422 \\ 2145 \\ +\ 2217 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 85 \\ -\ 59 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$250 \div 10 =$ ☐

8. [Large Number ×,÷]

☐

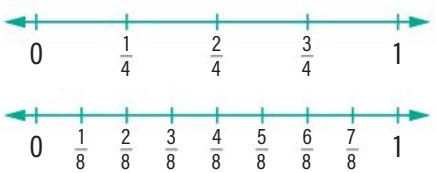
$3\overline{)9000}$

9. [Decimals]

$2.25 + $3.55 =

$ ☐

10. [Fractions]



Use <, = or > to make this statement true.

$\frac{2}{4}$ ☐ $\frac{3}{8}$

11. [Decimals / Fractions / Percentages]

Write 0.47 as a fraction.

☐

12. [Place Value]

What is the value of the digit 9 in the number 50.912?

☐

13. [Operations]

$4 +$ ☐ $= 4$

14. [Exploring Numbers]

Write the number 5041 in words.

☐

15. [Number Patterns / Equations]

$20 -$ ☐ $= 6$

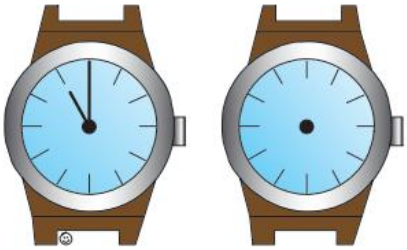
16. [Units of Measurement]

Convert to millimetres:

6.3 cm = ____ mm

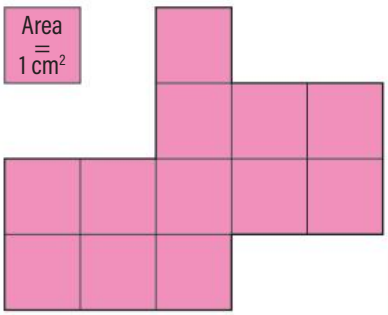
17. [Measuring]

Draw hands on the second watch to show the time 6 hours and 30 minutes earlier than the first.



18. [Perimeter / Area]

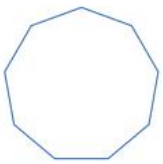
Find the area of this shape.



____ cm^2

19. [Shapes]

How many interior angles does a nonagon have?



____

20. [Location / Transformation]

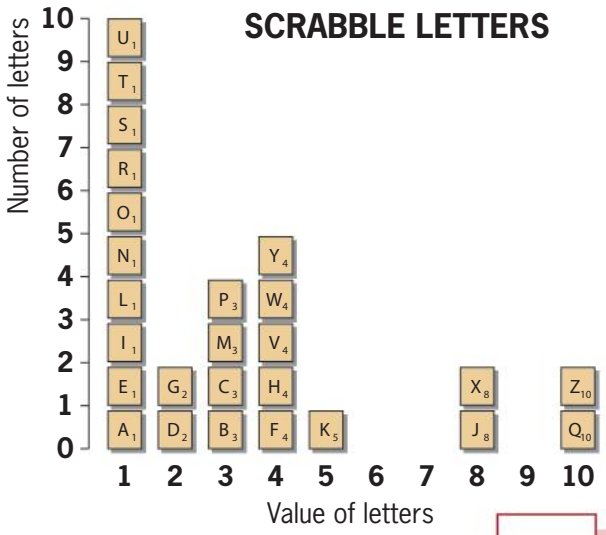
The shape has:

A line symmetry
B rotational symmetry
C both line and rotational symmetry

____

21. [Statistics / Probability]

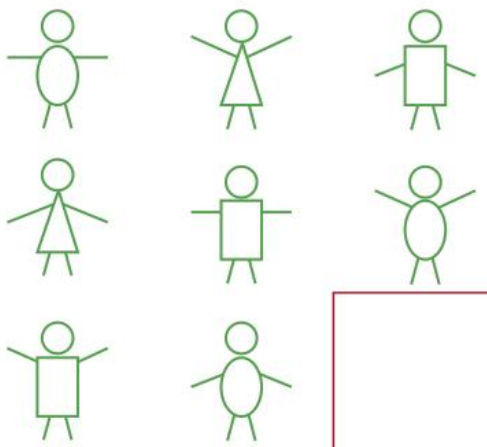
How many Scrabble letters have a value of four?



____

22. [Problem Solving 1]

Draw the missing figure.



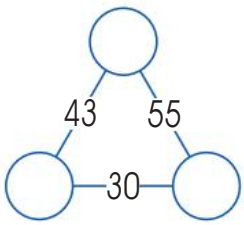
23. [Problem Solving 2] *

There are 92 beds in a 40-room motel. Each room has either 2 or 3 beds. How many rooms have 2 beds?

____

24. [Problem Solving 3]

Enter numbers in the circles so that the numbers on each line equal the sum of the numbers at each end.



MATHS MATE

Term 1 - Sheet 8

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	4	1	3	9	10	5	8	2	6	7
+ 9										

2. [– Whole Numbers to 10]

	3	10	4	7	9	5	2	8	6	11
– 1										

3. [× Whole Numbers to 10]

	9	7	8	6	5	3	4	1	2	10
× 7										

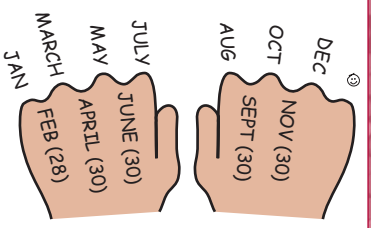
4. [÷ Whole Numbers to 10]

	24	6	18	30	42	12	48	54	36	60
÷ 6										

DAYS IN A MONTH

Thirty days has
September,
April, June and
November.
All the rest have
thirty-one,
Except February alone,
Which has twenty-eight
days clear,
And twenty-nine in each
leap year.

Months with 31 days are on the knuckles.



5. [Large Number +]

$$\begin{array}{r} 212 \\ 108 \\ 177 \\ +\ 301 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 954 \\ -\ 607 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$600 \div 10 =$

8. [Large Number ×,÷]

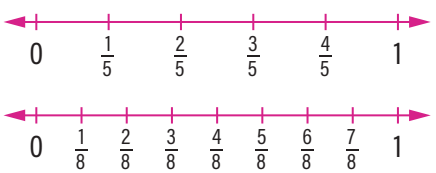
$4\overline{)8044}$

9. [Decimals]

$\$4.40 + \$4.75 =$

$

10. [Fractions]



Use <, = or > to make this statement true.

$\frac{4}{5}$ ☐ $\frac{7}{8}$

11. [Decimals / Fractions / Percentages]

Write 0.081 as a fraction.

12. [Place Value]

What is the value of the digit 3 in the number 2.403?

13. [Operations]

Which expression equals 8?

A $1 \div 8$
B $1 - 8$
C 1×8

14. [Exploring Numbers]

Write the number 15 800 in words.

15. [Number Patterns / Equations]

☐ $- 8 = 17$

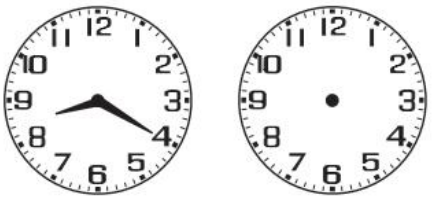
16. [Units of Measurement]

Convert to metres:

1.25 km = _____ m

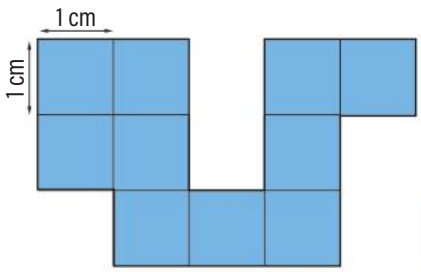
17. [Measuring]

Draw hands on the second clock to show the time 4 hours and 25 minutes later than the first.



18. [Perimeter / Area]

Find the area of this shape.



_____ cm^2

19. [Shapes]

How many sides does a heptagon have?

_____

20. [Location / Transformation]

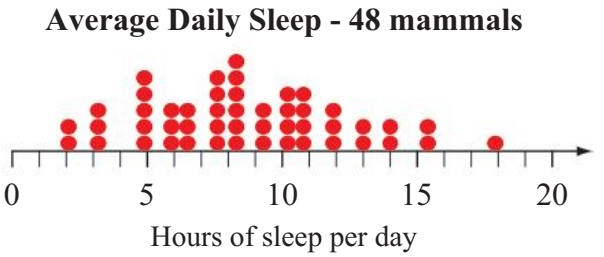
The shape has:

A line symmetry
B rotational symmetry
C both line and rotational symmetry

_____

21. [Statistics / Probability]

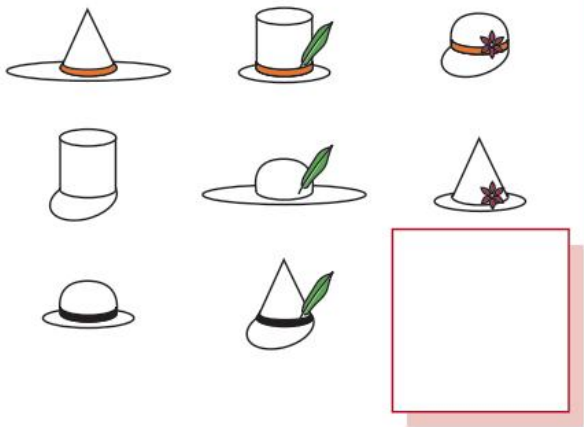
Estimate to the nearest hour, the most common number of hours of sleep required by a mammal.



_____ h

22. [Problem Solving 1]

Draw the missing hat.



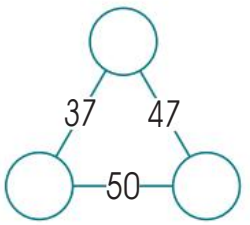
23. [Problem Solving 2] *

A geometric pattern is made using 17 triangles and squares. If the triangles and squares have a total of 64 sides, how many triangles were used?

_____

24. [Problem Solving 3]

Enter numbers in the circles so that the numbers on each line equal the sum of the numbers at each end.



MATHS MATE

Name: .....

Class: .....

Teacher: .....

Worksheet Results

Term 2

		Sheet 1	Sheet 2	Sheet 3	Sheet 4	Skill Builder links	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Skill Builder links
NUMBER & ALGEBRA	1. [+ Whole Numbers to 10]	1	1	1	1	1.1,2,3,4	1	1	1	1	1.1,2,3,4
	2. [– Whole Numbers to 10]	2	2	2	2	2.1,2,3,4,5	2	2	2	2	2.1,2,3,4,5
	3. [× Whole Numbers to 10]	3	3	3	3	3.3,4,5	3	3	3	3	3.1,2,3,4
	4. [÷ Whole Numbers to 10]	4	4	4	4	4.1,2	4	4	4	4	4.1,2
	5. [Large Number +]	5	5	5	5	5.2,3	5	5	5	5	5.2,3
	6. [Large Number –]	6	6	6	6	6.2,3	6	6	6	6	6.2
	7. [Powers of 10 ×,÷]	7	7	7	7	7.1,2	7	7	7	7	7.3,4
	8. [Large Number ×,÷]	8	8	8	8	8.2	8	8	8	8	8.5
	9. [Decimals]	9	9	9	9	9.7	9	9	9	9	9.8
	10. [Fractions]	10	10	10	10	10.10	10	10	10	10	10.14
	11. [Dec. / Frac. / Percentages]	11	11	11	11	11.7,13	11	11	11	11	11.6,11
	12. [Place Value]	12	12	12	12	12.2	12	12	12	12	12.3,6
	13. [Operations]	13	13	13	13	13.6	13	13	13	13	13.5
	14. [Exploring Numbers]	14	14	14	14	14.6,7	14	14	14	14	14.8
	15. [Number Patterns / Equations]	15	15	15	15	15.5,6	15	15	15	15	15.7
MEASUREMENT & SPACE	16. [Units of Measurement]	16	16	16	16	16.4	16	16	16	16	16.5
	17. [Measuring]	17	17	17	17	17.8	17	17	17	17	17.5,9
	18. [Perimeter / Area]	18	18	18	18	18.4	18	18	18	18	18.1,3
	19. [Shapes]	19	19	19	19	19.4	19	19	19	19	19.5,7
	20. [Location / Transformation]	20	20	20	20	20.4,5	20	20	20	20	20.6
S & P	21. [Statistics / Probability]	21	21	21	21	21.5,6	21	21	21	21	21.11
PROBLEM SOLVING	22. [Problem Solving 1]	22	22	22	22	Hints & Solutions	22	22	22	22	Hints & Solutions
	23. [Problem Solving 2]	23	23	23	23	Hints & Solutions	23	23	23	23	Hints & Solutions
	24. [Problem Solving 3]	24	24	24	24	Hints & Solutions	24	24	24	24	Hints & Solutions
	Total Correct										

MATHS MATE

Term 2 - Sheet 1

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	5	3	2	4	10	1	8	9	6	7
+ 4										

2. [– Whole Numbers to 10]

	10	17	18	16	14	12	11	15	9	13
– 8										

3. [× Whole Numbers to 10]

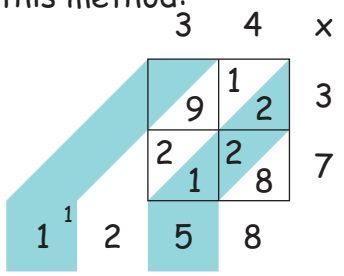
	9	7	8	6	5	3	4	1	2	10
× 3										

4. [÷ Whole Numbers to 10]

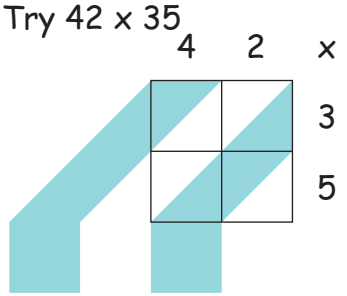
	90	18	27	45	81	72	63	36	54	9
÷ 9										

CHINESE LATTICE

Multiply 34 x 37 using this method:



Try 42 x 35



Answer: 1470

5. [Large Number +]

$$\begin{array}{r} 239 \\ +\ 145 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 200 \\ -\ \ 5 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 2571 \\ \times\ \ 10 \\ \hline \square \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 450 \\ \times\ \ 6 \\ \hline \square \end{array}$$

9. [Decimals]

How much change will you receive from $5.00 if you spend $2.65?

$ ____

10. [Fractions]

Complete to form equivalent fractions:

$\frac{3}{4} = \frac{\square}{8}$

11. [Decimals / Fractions / Percentages]

Write 50% as a fraction in simplest form.

—

12. [Place Value]

In which number does the digit 4 have a smaller value?

A 1435

B 247

13. [Operations] *

19 + 3 – 3 =

14. [Exploring Numbers]

Complete the next two multiples of 9.

9, 18, 27, __ , __

15. [Number Patterns / Equations]

30, 60, 120, 240, __ , __

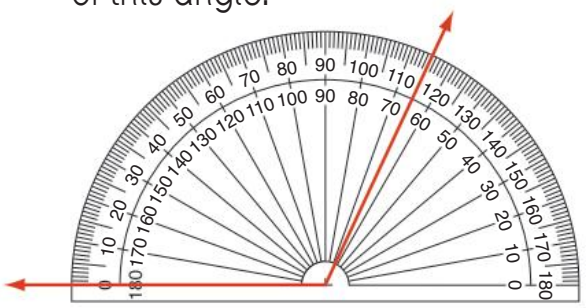
16. [Units of Measurement]

Convert to grams:

6 kg = ____ g

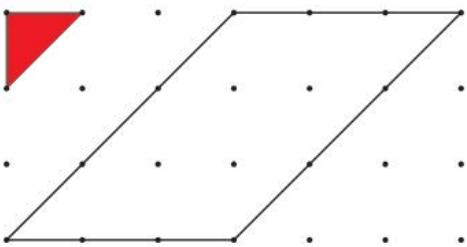
17. [Measuring]

Use the protractor to measure the size of this angle.



18. [Perimeter / Area]

How many small triangles are needed to cover the parallelogram?



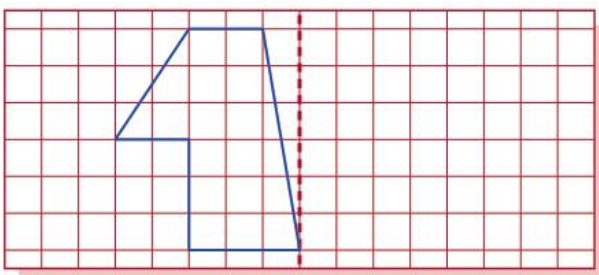
19. [Shapes]

I am a quadrilateral. I have both pairs of sides parallel. I have two acute and two obtuse angles. What shape am I?

A square
B parallelogram
C rectangle

20. [Location / Transformation]

Redraw this polygon after reflecting it in the dotted line.



21. [Statistics / Probability]

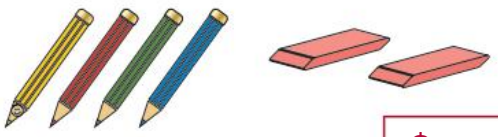
Which region had the smallest decrease in their birth rate between the two periods shown?

Projected Population Birth Rates
by Geographic Region

REGION	Birth rate (per 1000)	
	1985 - 1990	2020 - 2025
AFRICA	45	24
AMERICA	23	15
ASIA	27	17
EUROPE	14	13
OCEANIA	20	15

22. [Problem Solving 1] *

Four pencils cost as much as two erasers. How much are twelve pencils if one eraser is $1.50?



$ ____

23. [Problem Solving 2]

Fill in the missing digits in the sum.

$$\begin{array}{r} 3\,\square \\ +\,\square\,8 \\ \hline 6\,5 \end{array}$$

24. [Problem Solving 3]

Complete the multiplication table.

×		4	2
	20		
6	30		
			16

MATHS MATE

Term 2 - Sheet 2

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	4	8	5	7	1	6	2	3	10	9
+ 9										

2. [– Whole Numbers to 10]

	11	6	15	7	8	10	14	13	12	9
– 2										

3. [× Whole Numbers to 10]

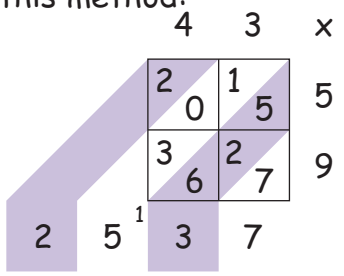
	5	7	1	6	2	3	10	9	4	8
× 9										

4. [÷ Whole Numbers to 10]

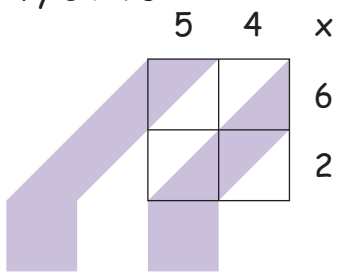
	12	24	8	32	16	4	40	20	28	36
÷ 4										

CHINESE LATTICE

Multiply 43 x 59 using this method:



Try 54 x 62



Answer: 3348

5. [Large Number +]

$$\begin{array}{r} 12 \\ 25 \\ +\ 36 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 400 \\ -\ \ 8 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 422 \\ \times\ 100 \\ \hline \square \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 704 \\ \times\ \ 8 \\ \hline \square \end{array}$$

9. [Decimals]

How much change will you receive from $4.00 if you spend $3.25?

$ ____

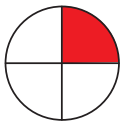
10. [Fractions]

Complete to form equivalent fractions:

$$\frac{2}{5} = \frac{8}{\square}$$

11. [Decimals / Fractions / Percentages]

Write 25% as a fraction in simplest form.



— ____

12. [Place Value]

In which number does the digit 8 have a greater value?

A 28 700
B 27 800

____

13. [Operations] *

$25 \times 6 \div 6 =$ ____

14. [Exploring Numbers]

Which list has only factors of 21?

A 1, 3, 21
B 2, 7, 21

____

15. [Number Patterns / Equations]

2, 6, 18, 54, ____ , ____

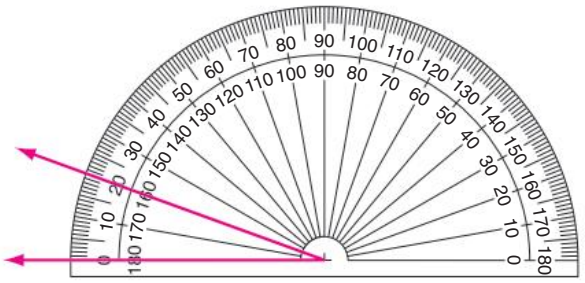
16. [Units of Measurement]

Convert to kilograms:

2 tonnes = ____ kg

17. [Measuring]

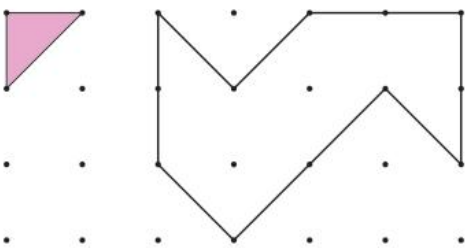
Use the protractor to measure the size of this angle.



____

18. [Perimeter / Area]

How many small triangles are needed to cover the shape?



____

19. [Shapes]

I am a quadrilateral. I have both pairs of sides parallel. My angles are all right angles. My diagonals are equal in length, but they do not cross at right angles. What shape am I?

A rectangle
B square
C kite

____

20. [Location / Transformation]

Redraw this polygon after translating it 7 units to the right and 2 units up.

21. [Statistics / Probability]

You have 100 grams of porridge and 100 grams of orange juice for breakfast. How many calories have you consumed?

Energy of Breakfast Foods		
Food	**Energy per 100 grams**	
	kilojoules (kJ)	calories
Cornflakes	1654	395
Rice Bubbles	1603	383
Porridge	1579	377
Orange Juice	188	45
Milk (whole)	272	65
Raisin Toast	1176	280

____

22. [Problem Solving 1] *

Two hammers cost as much as three screwdrivers. How much are four screwdrivers, if one hammer is $30?

$ ____

23. [Problem Solving 2]

Fill in the missing digits in the sum.

```
  4 □ 6
+ □ 7 8
-------
  8 0 □
```

24. [Problem Solving 3]

Complete the multiplication table.

×	9	5	
	27		18
		35	
5			

MATHS MATE

Term 2 - Sheet 3

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	4	5	2	3	7	6	8	1	9	10
+ 6										

2. [– Whole Numbers to 10]

	16	13	14	18	15	20	19	12	11	17
– 10										

3. [× Whole Numbers to 10]

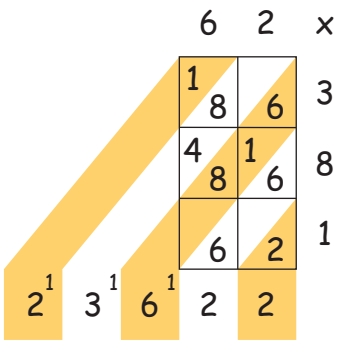
	10	6	4	5	2	1	7	3	8	9
× 5										

4. [÷ Whole Numbers to 10]

	24	48	64	32	8	56	40	80	16	72
÷ 8										

CHINESE LATTICE

Multiply 62 x 381 using the Chinese Lattice method:



Try setting up a grid to multiply 92 x 513

Answer: 47 196

5. [Large Number +]

$$\begin{array}{r} 459 \\ +\ 205 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 700 \\ -\ \ 3 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 304 \\ \times\ 100 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 803 \\ \times\ \ 5 \\ \hline \end{array}$$

9. [Decimals]

How much change will you receive from $5.00 if you spend $1.05?

$

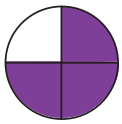
10. [Fractions]

Complete to form equivalent fractions:

$$\frac{9}{15} = \frac{\square}{5}$$

11. [Decimals / Fractions / Percentages]

Write 75% as a fraction in simplest form.



12. [Place Value]

In which number does the digit 2 have a greater value?

A 73.12

B 69.542

13. [Operations] *

18 – 7 + 7 =

14. [Exploring Numbers]

Which list has only factors of 32?

A 1, 2, 6, 32

B 1, 4, 16, 32

15. [Number Patterns / Equations]

96, 48, 24, 12, __ , __

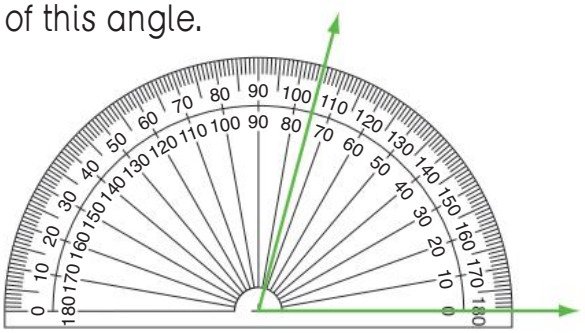
16. [Units of Measurement]

Convert to tonnes:

15 000 kg = ☐ t

17. [Measuring]

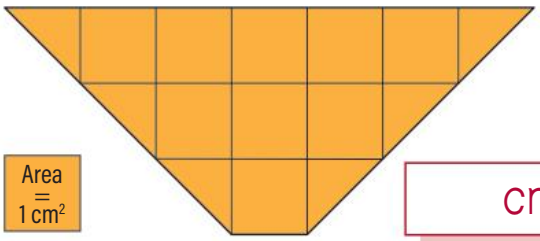
Use the protractor to measure the size of this angle.



☐

18. [Perimeter / Area]

Find the area of this trapezium.



☐ cm²

19. [Shapes]

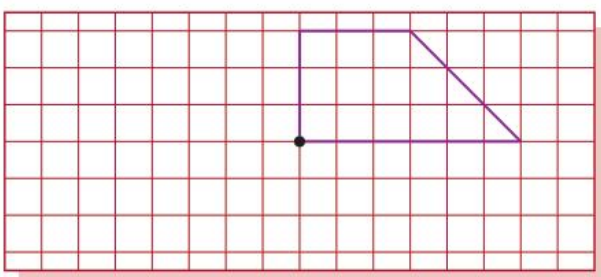
I am a quadrilateral. I have all sides equal in length. My diagonals are equal in length and cross at right angles. What shape am I?

A rectangle
B rhombus
C square

☐

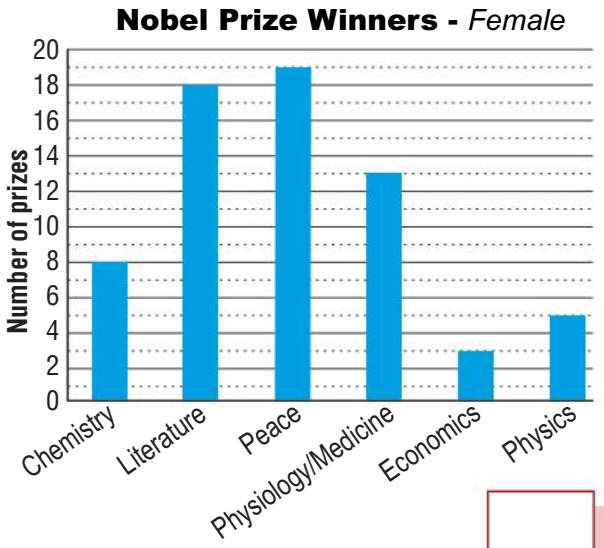
20. [Location / Transformation]

Redraw this trapezium after rotating it 180° around the marked point.



21. [Statistics / Probability]

How many Nobel prizes for Peace have been won by women before 2025?



☐

22. [Problem Solving 1] *

Four erasers cost as much as two pairs of scissors. How much is one pair of scissors, if one eraser is $1.50?

$ ☐

23. [Problem Solving 2]

Fill in the missing digits in the sum.

$$\begin{array}{r} 1\ 1\ \square \\ 5\ 3\ 2 \\ +\ \square\ 6\ 9 \\ \hline 9\ \square\ 8 \end{array}$$

24. [Problem Solving 3]

Complete the multiplication table.

×		4	2
		12	
6	48		
			2

MATHS MATE

Term 2 - Sheet 4

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	7	5	6	4	1	8	2	9	10	3
+ 7										

2. [– Whole Numbers to 10]

	5	12	13	11	9	7	6	10	4	8
– 3										

3. [× Whole Numbers to 10]

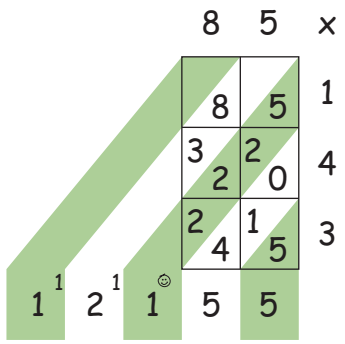
	3	10	7	1	4	2	9	8	5	6
× 6										

4. [÷ Whole Numbers to 10]

	10	4	2	20	6	14	12	8	18	16
÷ 2										

CHINESE LATTICE

Multiply 85 x 143 using the Chinese Lattice method:



Try setting up a grid to multiply 54 x 273

Answer: 14 742

5. [Large Number +]

$$\begin{array}{r} 333 \\ +\ 529 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 800 \\ -\ \ 6 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 115 \\ \times 1000 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 240 \\ \times\ \ 7 \\ \hline \end{array}$$

9. [Decimals]

How much change will you receive from $10.00 if you spend $4.15?

$

10. [Fractions]

Complete to form equivalent fractions:

$$\frac{3}{12} = \frac{\square}{4}$$

11. [Decimals / Fractions / Percentages]

Write 30% as a fraction in simplest form.

12. [Place Value]

In which number does the digit 6 have a greater value?

A 902.365

B 89.612

13. [Operations] *

$28 \div 7 \times 7 =$

14. [Exploring Numbers]

Complete the next two multiples of 12.

12, 24, 36, __ , __

15. [Number Patterns / Equations]

800, 400, 200, 100, __ , __

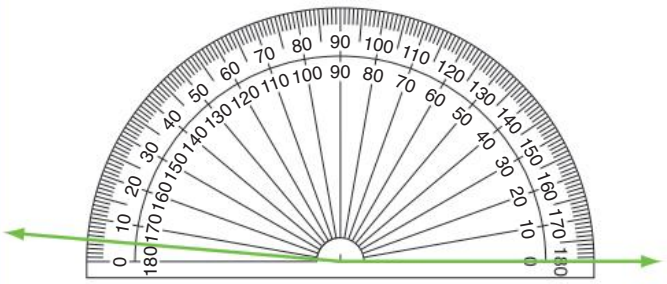
16. [Units of Measurement]

Convert to grams:

3.8 kg = ____ g

17. [Measuring]

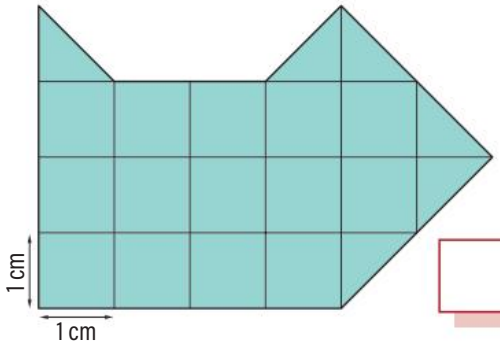
Use the protractor to measure the size of this angle.



____

18. [Perimeter / Area]

Find the area of this shape.



____ cm^2

19. [Shapes]

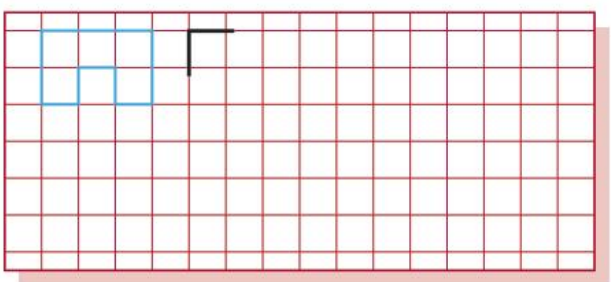
I am a quadrilateral. I have only one pair of parallel sides. What shape am I?

A parallelogram
B rhombus
C trapezium

____

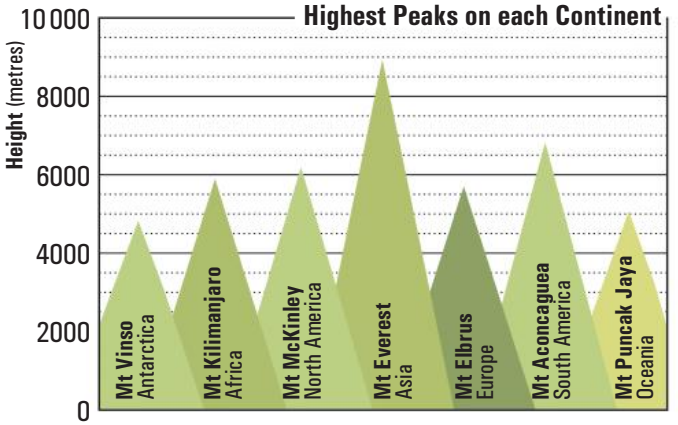
20. [Location / Transformation]

Redraw this shape after tripling its size.



21. [Statistics / Probability]

To the nearest thousand metres, what is the height of Mount McKinley, the highest peak in North America?



____ m

22. [Problem Solving 1] *

Five ballpoint pens cost as much as two fountain pens. How much are six fountain pens if one ballpoint pen costs $1?

$ ____

23. [Problem Solving 2]

Fill in the missing digits in the sum.

$$\begin{array}{r} 3\ 4\ \square \\ 2\ 4\ 7 \\ +\ 1\ \square\ 7 \\ \hline \square\ 4\ 1 \end{array}$$

24. [Problem Solving 3]

Complete the multiplication table.

×	3		
		63	
1		7	4
			8

MATHS MATE

Term 2 - Sheet 5

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	4	1	3	9	10	5	8	2	6	7
+ 8										

2. [– Whole Numbers to 10]

	6	5	14	12	8	9	7	11	13	10
– 4										

3. [× Whole Numbers to 10]

	9	10	4	5	2	3	7	6	8	1
× 8										

4. [÷ Whole Numbers to 10]

	80	50	10	100	90	70	30	40	20	60
÷ 10										

ROMAN NUMERALS

The Roman number system can still be seen today: on clock faces, movie release dates, foundation stones of buildings and on tombstones.

I	1
V	5
X	10
L	50
C	100
D	500
M	1000

5. [Large Number +]

$$\begin{array}{r} 474 \\ +\ 135 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 900 \\ -\ \ 66 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$500 \div 100 =$

8. [Large Number ×,÷]

$2\overline{)188}$

9. [Decimals]

$$\begin{array}{r} 2.99 \\ +\ 17.5 \\ \hline \end{array}$$

10. [Fractions]

Simplify: $\frac{3}{9}$

11. [Decimals / Fractions / Percentages]

Write the mixed number $2\frac{1}{2}$ as a decimal.

12. [Place Value]

$6892 < 6982$

True or false?

13. [Operations] *

$5 + 6 - 4 =$

14. [Exploring Numbers]

Which number is a prime?

21, 23 or 25

15. [Number Patterns / Equations]

$\square \times 7 = 35$

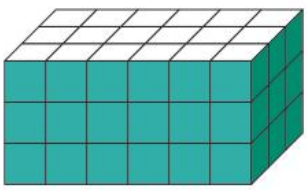
16. [Units of Measurement]

Convert to millilitres:

7 L = _____ mL

17. [Measuring]

Count the cubes to find the volume of the prism.

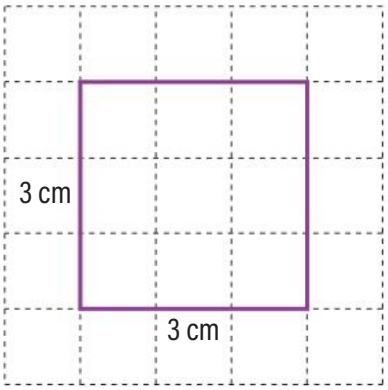


Volume = 1 cm³

_____ cm^3

18. [Perimeter / Area]

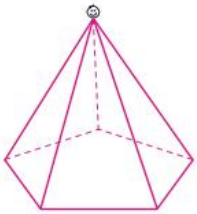
Find the perimeter of the square.



_____ cm

19. [Shapes]

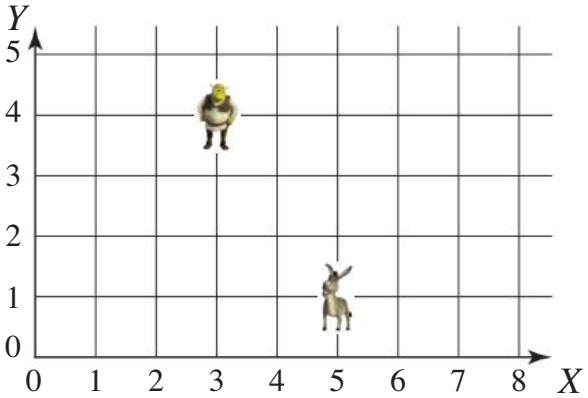
How many edges does a pentagonal pyramid have?



_____

20. [Location / Transformation]

What are the coordinates of Shrek and Donkey on the grid?



Shrek = _____ Donkey = _____

21. [Statistics / Probability]

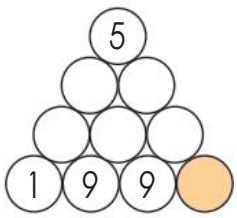
Leo has seven 20-cent coins and five 10-cent coins in his pocket. What is the chance that the first coin he takes out will be a 20-cent coin?

A impossible
B unlikely
C likely
D certain

_____

22. [Problem Solving 1]

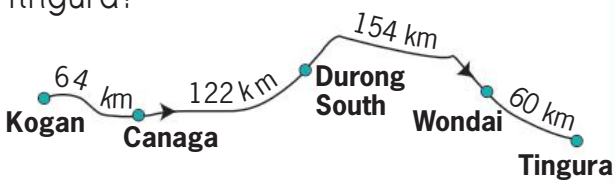
A single digit number belongs in each circle, and it must equal the difference between the two numbers it sits on. What number belongs in the shaded circle?



_____

23. [Problem Solving 2] *

Bobby's car uses 9 litres of fuel per 100 km. How many litres of fuel are required to travel from Kogan to Tingura?



_____ L

24. [Problem Solving 3] *

Each letter represents a different digit from 1 to 9. If T is the only odd digit, what number does TWO stand for?

$$\begin{array}{r} ONE \\ +ONE \\ \hline TWO \end{array}$$

TWO = _____

MATHS MATE

Term 2 - Sheet 6

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	8	9	6	10	4	1	3	5	7	2
+ 4										

2. [– Whole Numbers to 10]

	17	12	14	11	18	19	10	15	16	13
– 9										

3. [× Whole Numbers to 10]

	9	1	7	2	10	5	4	8	3	6
× 2										

4. [÷ Whole Numbers to 10]

	30	20	10	35	40	45	50	25	15	5
÷ 5										

ROMAN NUMERALS

Symbols V, L and D are never repeated.

Symbols I, X, C and M can be used two or three times in a row.

II	=	2
III	=	3
XX	=	20
XXX	=	30
CC	=	200
CCC	=	300
MM	=	2000
MMM	=	3000

5. [Large Number +]

$$\begin{array}{r} 582 \\ +\ 393 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 500 \\ -\ \ 59 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$3200 \div 100 =$

8. [Large Number ×,÷]

$5\overline{)450}$

9. [Decimals]

$$\begin{array}{r} 9.42 \\ +\ 3.6 \\ \hline \end{array}$$

10. [Fractions]

Simplify: $\frac{30}{50}$

11. [Decimals / Fractions / Percentages]

Write the mixed number $3\frac{1}{5}$ as a decimal.

12. [Place Value]

Which number is greater?

0.357 or 0.375

13. [Operations] *

$18 - 9 - 2 =$

14. [Exploring Numbers]

List the composite numbers between 11 and 19.

15. [Number Patterns / Equations]

$6 \times \square = 48$

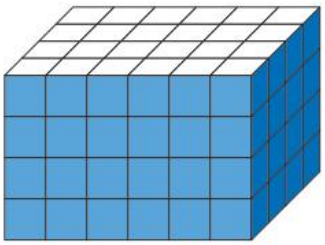
16. [Units of Measurement]

Convert to litres:

9000 mL = _____ L

17. [Measuring]

Count the cubes to find the volume of the prism.

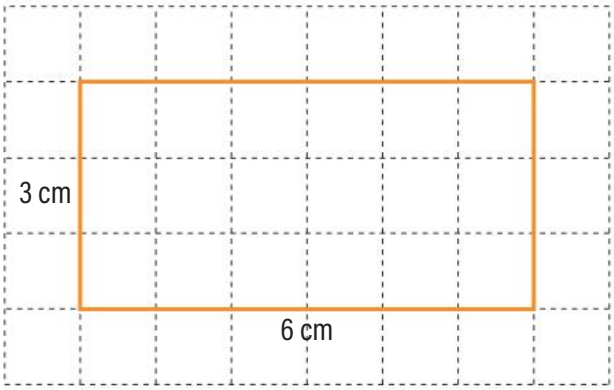


Volume = 1 cm³

_____ cm^3

18. [Perimeter / Area]

Find the perimeter of the rectangle.



_____ cm

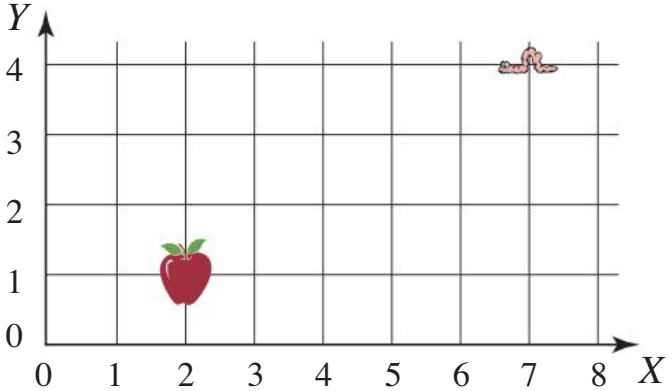
19. [Shapes]

How many faces are there on a rectangular pyramid?

_____

20. [Location / Transformation]

What are the coordinates of the worm and the apple on the grid?



worm = _____ apple = _____

21. [Statistics / Probability]

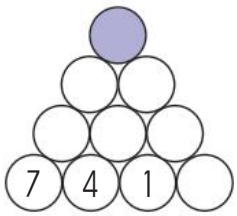
In a lotto draw, balls 1 to 50 are mixed together. A machine then randomly selects balls numbered 13, 11, 7, 27 and 41. Is the sixth number drawn:

A more likely to be odd than even,
B more likely to be even than odd, or
C just as likely to be odd as even?

_____

22. [Problem Solving 1]

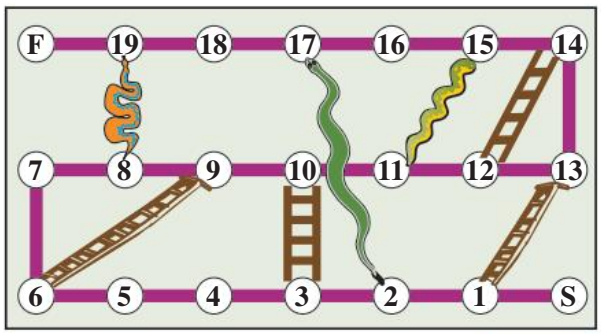
A single digit number belongs in each circle, and it must equal the difference between the two numbers it sits on. What is the largest number that can go in the shaded circle?



_____

23. [Problem Solving 2]

Jane rolls nothing but sixes in the game of snakes and ladders below. How many rolls of the die will it take her to move from S to F?



_____

24. [Problem Solving 3] *

Each letter represents a different digit from 1 to 9. If R = 8, what number does FOUR stand for?

$$\begin{array}{r} TWO \\ +\ TWO \\ \hline FOUR \end{array}$$

FOUR = _____

MATHS MATE

Term 2 - Sheet 7

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	4	1	3	9	10	5	8	2	6	7
+ 3										

2. [– Whole Numbers to 10]

	16	11	13	10	17	18	9	14	15	12
– 8										

3. [× Whole Numbers to 10]

	2	4	10	1	8	9	6	7	5	3
× 10										

4. [÷ Whole Numbers to 10]

	49	56	35	63	42	14	7	21	70	28
÷ 7										

ROMAN NUMERALS

To represent numbers greater than V, X, L, C, D, or M add lower value symbols to the right-hand side keeping them in order of largest value to smallest value.

VI	= 6	LX	= 60
VII	= 7	LXVI	= 66
VIII	= 8	LXXVI	= 76
XI	= 11	LXXX	= 80
XII	= 12	CXII	= 112
XIII	= 13	CXXII	= 122
XV	= 15	CL	= 150
XVI	= 16	DCCI	= 701
XVII	= 17	DCVII	= 607
XVIII	= 18	DCCC	= 800

5. [Large Number +]

$$\begin{array}{r} 4\,1\,8\,2 \\ +\,5\,0\,3\,5 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 3\,0\,0 \\ -\quad 3\,8 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$6700 \div 100 =$ ☐

8. [Large Number ×,÷]

☐

$8\overline{)5600}$

9. [Decimals]

$$\begin{array}{r} 0.2\,5 \\ 5.3\,8 \\ +\,2.7\,5 \\ \hline \square \end{array}$$

10. [Fractions]

Which of the following fractions **cannot** be simplified?

A $\frac{6}{8}$ B $\frac{5}{8}$ C $\frac{4}{8}$ D $\frac{3}{8}$

and

11. [Decimals / Fractions / Percentages]

Write the improper fraction $\frac{17}{10}$ as a decimal. ☐

12. [Place Value]

$0.105 > 0.15$

True or false? ☐

13. [Operations] *

$2 \times 4 \times 3 =$ ☐

14. [Exploring Numbers]

Which of the following is **not** a composite number?

27, 28 or 29 ☐

15. [Number Patterns / Equations]

☐ $\times 9 = 63$

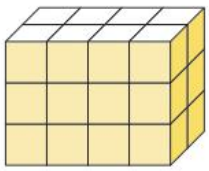
16. [Units of Measurement]

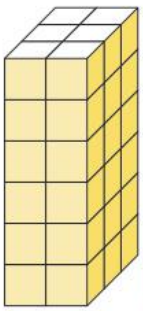
Convert to litres:

40 000 mL = _____ L

17. [Measuring]

Which prism has the lesser volume?

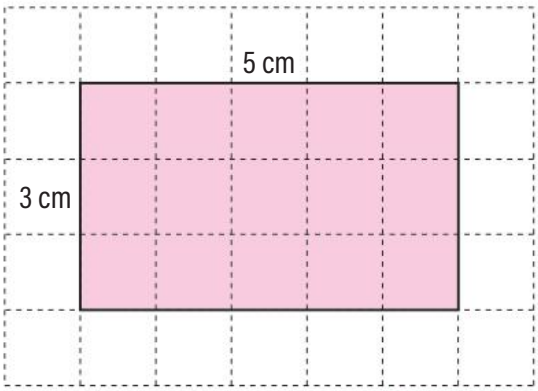
A 

B 

_____

18. [Perimeter / Area]

Find the area of the shaded rectangle.

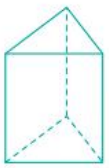


_____ cm^2

19. [Shapes]

What is the name of this shape?

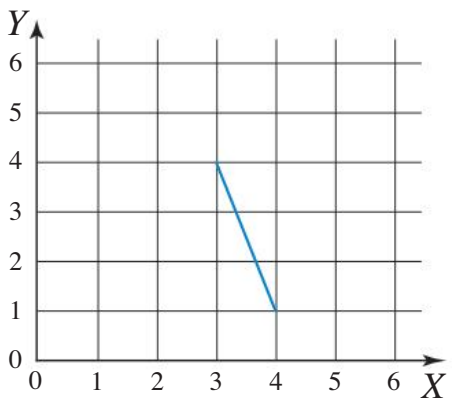
A triangular prism
B triangular pyramid
C rectangular pyramid
D rectangular prism



_____

20. [Location / Transformation]

Start at (3,4). Draw a line to (5,5) and continue to (5,3), (1,5), (1,3), (3,4) and (2,1).



21. [Statistics / Probability]

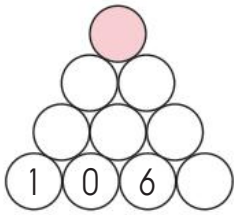
A bag contains 4 red, 6 yellow and 7 blue raffle tickets. What is the chance that the first ticket drawn will be black?

A impossible
B unlikely
C likely
D certain

_____

22. [Problem Solving 1]

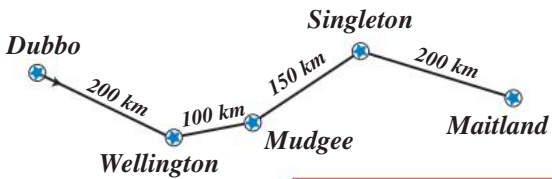
A single digit number belongs in each circle, and it must equal the difference between the two numbers it sits on. What is the largest number that can go in the shaded circle?



_____

23. [Problem Solving 2] *

Jack's car can travel 15 kilometres per litre of petrol. He leaves Dubbo with 30 litres of petrol in his car and drives towards Maitland. Which town will he be closest to when he runs out of petrol?



_____

24. [Problem Solving 3] *

The letters A, B and C stand for different digits from 1 to 9. If A < B < C, what digit does each letter represent?

$$\begin{array}{r} A\ B\ C \\ B\ C\ A \\ +\ C\ A\ B \\ \hline 7\ 7\ 7 \end{array}$$

A = _____ B = _____ C = _____

MATHS MATE

Term 2 - Sheet 8

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	7	5	6	4	1	8	2	9	10	3
+ 5										

2. [– Whole Numbers to 10]

	18	15	19	12	14	20	17	13	11	16
– 10										

3. [× Whole Numbers to 10]

	10	6	4	5	2	1	7	3	8	9
× 1										

4. [÷ Whole Numbers to 10]

	9	72	81	27	63	54	45	90	36	18
÷ 9										

ROMAN NUMERALS

Place an I before a V or an X to reduce the value by 1.

Place an X before an L or a C to reduce the value by 10.

Place a C before a D or an M to reduce the value by 100.

IV = 4	IX = 9
XL = 40	XC = 90
CD = 400	CM = 900

Note these:

8 is VIII not IIX
14 is XIV not IXV
99 is XCIX not IC

5. [Large Number +]

$$\begin{array}{r} 71 \\ 45 \\ +\,73 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 600 \\ -\,47 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$84\,500 \div 100 =$

8. [Large Number ×,÷]

$3\overline{)129}$

9. [Decimals]

$$\begin{array}{r} 27.08 \\ 40.96 \\ +\;\;6.75 \\ \hline \end{array}$$

10. [Fractions]

Which of the following fractions **cannot** be simplified?

A $\frac{5}{12}$ B $\frac{3}{12}$ C $\frac{6}{12}$ D $\frac{7}{12}$

and

11. [Decimals / Fractions / Percentages]

Write the improper fraction $\frac{155}{100}$ as a decimal.

12. [Place Value]

Which number is smaller?

15.078 or 15.87

13. [Operations] *

$5 \times 6 \div 3 =$

14. [Exploring Numbers]

List the prime numbers between 20 and 30.

15. [Number Patterns / Equations]

$4 \times \square = 24$

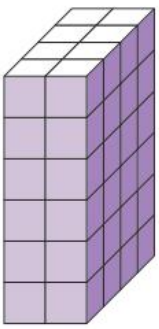
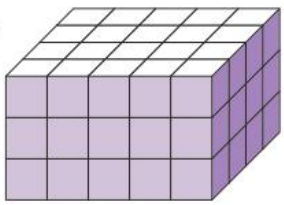
16. [Units of Measurement]

Convert to millilitres:

2.5 L = _____ mL

17. [Measuring]

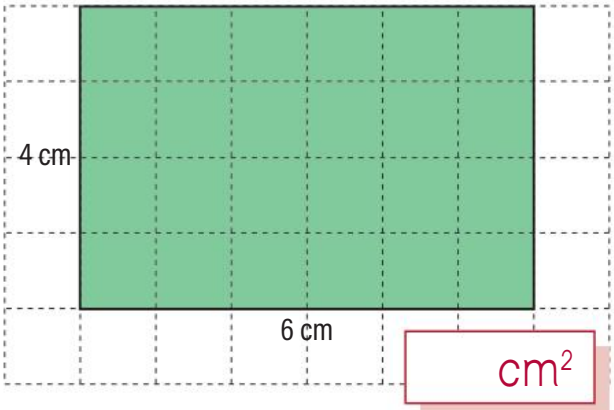
Which prism has the greater volume?

A  B 

_____

18. [Perimeter / Area]

Find the area of the shaded rectangle.



_____ cm^2

19. [Shapes]

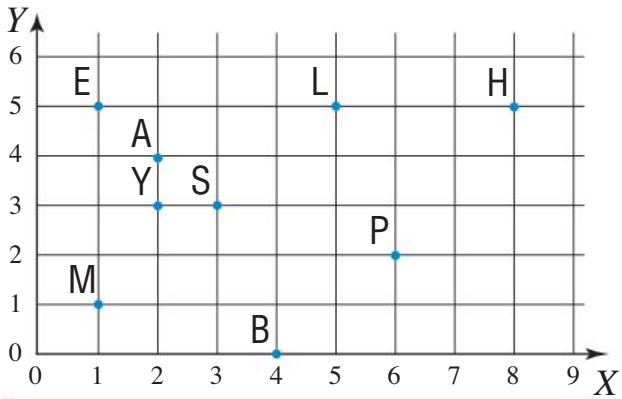
The bases of a square prism are squares. What are the lateral faces?

_____

20. [Location / Transformation]

Find the letter at each pair of coordinates to decode the message.

(4,0) (1,5) (8,5) (2,4) (6,2) (6,2) (2,3)



_____

21. [Statistics / Probability]

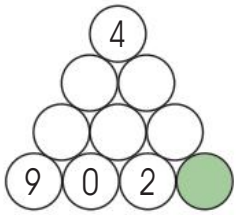
In a lotto draw, balls 1 to 50 are mixed together. A machine then randomly selects balls numbered 18, 12, 3, 7 and 6. Is the sixth number drawn:

A more likely to be less than 20,
B more likely to be more than 20, or
C just as likely to be less than 20 as it is more than 20?

_____

22. [Problem Solving 1]

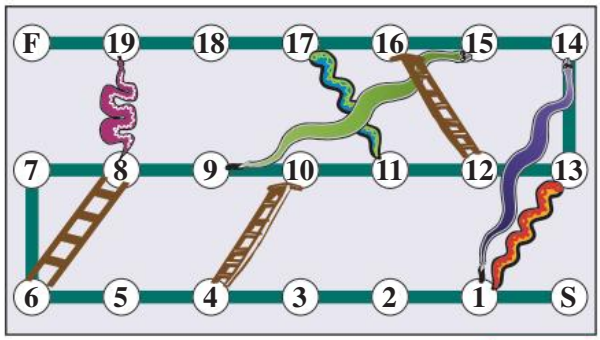
A single digit number belongs in each circle, and it must equal the difference between the two numbers it sits on. What number belongs in the shaded circle?



_____

23. [Problem Solving 2]

If you could roll the same number every time, what number would you choose so that you could move from S to F in the least number of rolls?



_____

24. [Problem Solving 3] *

Each letter represents a different digit from 0 to 9. If E = 5, what number does SPEED stand for?

$$\begin{array}{r} S\ P\ E\ E\ D \\ S\ P\ E\ E\ D \\ +\ S\ P\ E\ E\ D \\ \hline K\ I\ L\ L\ S \end{array}$$

SPEED = _____

MATHS MATE

Name: .....

Class: .....

Teacher: .....

Worksheet Results

Term 3

		Sheet 1	Sheet 2	Sheet 3	Sheet 4	Skill Builder links	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Skill Builder links
NUMBER & ALGEBRA	1. [+ Whole Numbers to 10]	1	1	1	1	1.1,2,3,4	1	1	1	1	1.1,2,3,4
	2. [– Whole Numbers to 10]	2	2	2	2	2.1,2,3,4,5	2	2	2	2	2.1,2,3,4,5
	3. [× Whole Numbers to 10]	3	3	3	3	3.3,4,5	3	3	3	3	3.1,2,3,4
	4. [÷ Whole Numbers to 10]	4	4	4	4	4.1,2	4	4	4	4	4.1,2
	5. [Large Number +]	5	5	5	5	5.2,3	5	5	5	5	5.2,3
	6. [Large Number –]	6	6	6	6	6.2	6	6	6	6	6.2,3
	7. [Powers of 10 ×,÷]	7	7	7	7	7.1,2	7	7	7	7	7.3,4
	8. [Large Number ×,÷]	8	8	8	8	8.2,3	8	8	8	8	8.5
	9. [Decimals]	9	9	9	9	9.9,10	9	9	9	9	9.11
	10. [Fractions]	10	10	10	10	10.12,13	10	10	10	10	10.15
	11. [Dec. / Frac. / Percentages]	11	11	11	11	11.9,10	11	11	11	11	11.12,14
	12. [Place Value]	12	12	12	12	12.4,7	12	12	12	12	12.8,9,11
	13. [Operations]	13	13	13	13	13.7	13	13	13	13	13.5,8
	14. [Exploring Numbers]	14	14	14	14	14.9,10	14	14	14	14	14.7
	15. [Number Patterns / Equations]	15	15	15	15	15.8	15	15	15	15	15.9
MEASUREMENT & SPACE	16. [Units of Measurement]	16	16	16	16	16.6	16	16	16	16	16.3,4,5
	17. [Measuring]	17	17	17	17	17.6	17	17	17	17	17.10
	18. [Perimeter / Area]	18	18	18	18	18.3	18	18	18	18	18.3,6
	19. [Shapes]	19	19	19	19	19.9	19	19	19	19	19.10
	20. [Location / Transformation]	20	20	20	20	20.7,8	20	20	20	20	20.5
S & P	21. [Statistics / Probability]	21	21	21	21	21.13	21	21	21	21	21.12,14
PROBLEM SOLVING	22. [Problem Solving 1]	22	22	22	22	Hints & Solutions	22	22	22	22	Hints & Solutions
	23. [Problem Solving 2]	23	23	23	23	Hints & Solutions	23	23	23	23	Hints & Solutions
	24. [Problem Solving 3]	24	24	24	24	Hints & Solutions	24	24	24	24	Hints & Solutions
	Total Correct										

MATHS MATE

Term 3 - Sheet 1

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	25	20	13	29	8	21	16	12	7	14
+ 4										

2. [– Whole Numbers to 10]

	13	8	16	21	10	14	9	32	15	7
– 6										

3. [× Whole Numbers to 10]

	3	5	9	8	7	4	6	1	10	2
× 8										

4. [÷ Whole Numbers to 10]

	21	63	70	35	56	14	42	49	28	7
÷ 7										

DIVISIBILITY BY 2

A number is divisible by **2** if the last digit is an even number.

e.g. **20** ÷ 2 = 10
32 ÷ 2 = 16
154 ÷ 2 = 77
2386 ÷ 2 = 1193
18 ÷ 2 = 9

DIVISIBILITY BY 5

A number is divisible by **5** if the last digit is zero or five.

e.g. **80** ÷ 5 = 16
45 ÷ 5 = 9

5. [Large Number +]

$$\begin{array}{r} 605 \\ +\ 145 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 56 \\ -\ 47 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 40 \\ \times\ 10 \\ \hline \square \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 144 \\ \times\ \ 6 \\ \hline \square \end{array}$$

9. [Decimals]

$3 - 0.8 =$ ☐

10. [Fractions]

$\frac{1}{6} + \frac{4}{6} =$ ☐

11. [Decimals / Fractions / Percentages]

Write 0.13 as a percentage. ☐ %

12. [Place Value]

Place in order from smallest to largest:

96, 159, 196, 156, 116

☐

13. [Operations] *

$7 + 2 \times 3 =$ ☐

14. [Exploring Numbers]

Complete the missing factor in the prime factorisation of 28:

$28 = 2 \times 2 \times$ ☐

15. [Number Patterns / Equations]

$36 \div$ ☐ $= 9$

16. [Units of Measurement]

Convert to seconds:

5 min = _____ s

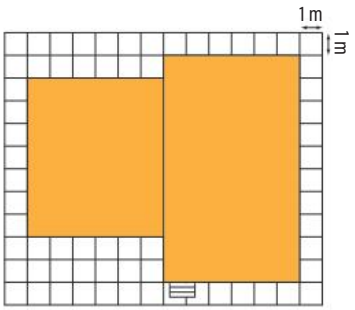
17. [Measuring]

The movie begins at 6:00 pm and lasts 115 minutes. When does the movie finish?

_____ : _____

18. [Perimeter / Area] *

Use the grid and scale to find the total floor area of this house.

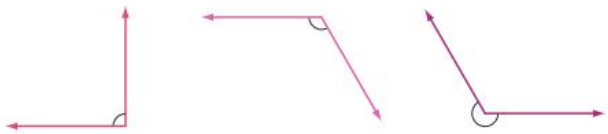


= 1 square metre

_____ m^2

19. [Shapes]

Circle the obtuse angle.



20. [Location / Transformation]

You are in Dublin. In which direction is Drogheda?

_____

21. [Statistics / Probability]

What is the probability that this spinner will stop on a 5? [Give the answer as a fraction.]

_____

22. [Problem Solving 1] *

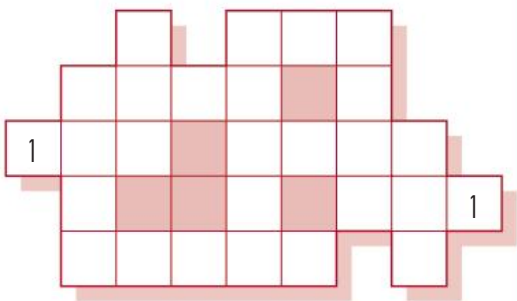
The sum of two consecutive whole numbers is 97. What are the two numbers?

_____ and _____

23. [Problem Solving 2]

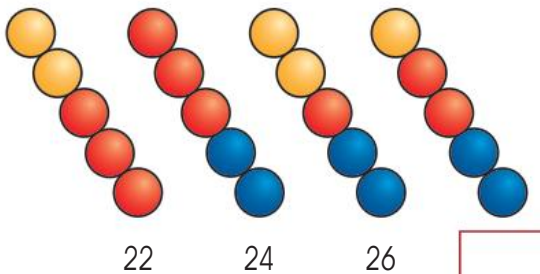
Fill in the cross number puzzle using the following numbers:

3 digits: 191, 312, 411, 491, 611
4 digits: 1969, 1973, 1974, 1980
5 digits: 91413, 60151



24. [Problem Solving 3] *

Each bead has a value according to its colour. The values of the first three strings of beads are given. What is the value of the last string?



_____

MATHS MATE

Term 3 - Sheet 2

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	13	18	22	17	11	6	10	4	25	19
+ 10										

2. [– Whole Numbers to 10]

	20	8	9	6	7	15	14	22	13	31
– 5										

3. [× Whole Numbers to 10]

	7	6	5	10	4	2	1	8	9	3
× 9										

4. [÷ Whole Numbers to 10]

	21	18	24	3	27	30	12	15	6	9
÷ 3										

DIVISIBILITY BY 4

A number is divisible by **4** if the last two digits are divisible by 4.

e.g. **216** ÷ 4 = 54
1992 ÷ 4 = 498
300 ÷ 4 = 75
840 ÷ 4 = 210

DIVISIBILITY BY 8

A number is divisible by **8** if the last three digits are divisible by 8.

e.g. **1480** ÷ 8 = 185
23000 ÷ 8 = 2875

5. [Large Number +]

$$\begin{array}{r} 3073 \\ +\ 2874 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 857 \\ -\ 339 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 830 \\ \times\ 100 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 157 \\ \times\ \ 8 \\ \hline \end{array}$$

9. [Decimals]

$4 - 0.91 =$

10. [Fractions]

$\frac{3}{8} - \frac{2}{8} =$

11. [Decimals / Fractions / Percentages]

Write 0.8 as a percentage. ..... %

12. [Place Value]

Place in order from largest to smallest:

7.7, 7.1, 1.7, 7.17, 7.01

13. [Operations] *

$18 - 4 \times 4 =$

14. [Exploring Numbers]

Complete the missing factors in the prime factorisation of 60:

$60 = 2 \times 2 \times$ ..... $\times$ .....

15. [Number Patterns / Equations]

$56 \div$ ..... $= 7$

16. [Units of Measurement]

Convert to minutes:

4 h = ____ min

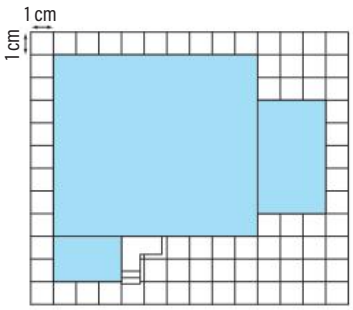
17. [Measuring]

The tennis final began at 11:30 pm and finished two hours and 20 minutes later. At what time did the tennis final finish?

____ : ____

18. [Perimeter / Area] *

Use the grid and scale to find the total area of the doll's house plan.

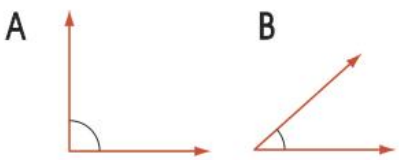


= 1 square centimetre

____ cm^2

19. [Shapes]

Which angle is an acute angle?



____

20. [Location / Transformation]

Travel west from the starting point. At the first intersection turn right. At the next intersection head east for 3 blocks and then turn south. To which square are you headed?

***Christchurch** New Zealand*

____

21. [Statistics / Probability]

A store has 50 boxes of cereal. There is a small toy in 23 of these boxes. What is the probability of choosing a box with a toy inside? [Give the answer as a fraction.]

____

22. [Problem Solving 1] *

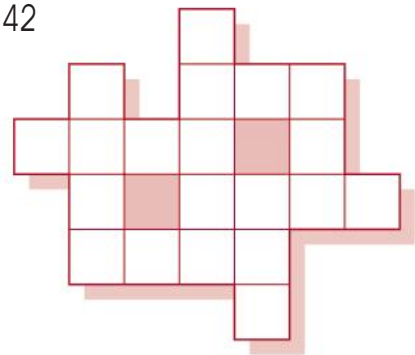
Carl looked at the page numbers on the open book in front of him. The left and right page numbers added to 333. What were the page numbers?

____ and ____

23. [Problem Solving 2]

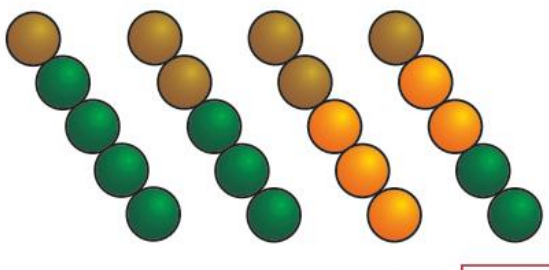
Fill in the cross number puzzle using the following numbers:

3 digits: 489, 789, 949
4 digits: 3726, 4790, 5768, 6728
5 digits: 54842



24. [Problem Solving 3] *

Each bead has a value according to its colour. The values of the first three strings of beads are given. What is the value of the last string?



17 14 8 ____

MATHS MATE

Term 3 - Sheet 3

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	11	9	23	17	15	18	22	26	14	10
+ 6										

2. [– Whole Numbers to 10]

	14	25	12	23	11	9	18	10	36	17
– 8										

3. [× Whole Numbers to 10]

	9	8	7	4	6	1	10	2	3	5
× 4										

4. [÷ Whole Numbers to 10]

	2	16	4	18	20	6	14	10	12	8
÷ 2										

DIVISIBILITY BY 3

- A number is divisible by **3** if the sum of its digits is divisible by 3.

Is 276 divisible by 3? Yes, because 2 + 7 + 6 is 15, which is divisible by 3.

DIVISIBILITY BY 6

- A number is divisible by **6** if it is even and the sum of its digits is divisible by 3.

DIVISIBILITY BY 9

- A number is divisible by **9** if the sum of its digits is divisible by 9.

5. [Large Number +]

$$\begin{array}{r} 142 \\ 560 \\ 123 \\ +\ \ 32 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 257 \\ -\ 179 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 70 \\ \times 100 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 72 \\ \times 31 \\ \hline \\ \hline \end{array}$$

9. [Decimals]

$$\begin{array}{r} 5.31 \\ -\ 0.87 \\ \hline \end{array}$$

10. [Fractions]

$\frac{2}{7} + \frac{3}{7} =$

11. [Decimals / Fractions / Percentages]

Write 75% as a decimal.

12. [Place Value]

Place in descending order:

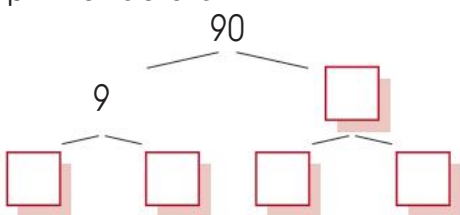
5.5, 5, 5.4, 4.54, 5.04

13. [Operations] *

$15 \div 5 - 2 =$

14. [Exploring Numbers]

Complete the factor tree and write 90 as a product of its prime factors.



90 =

15. [Number Patterns / Equations]

$\square \div 9 = 8$

16. [Units of Measurement]

Convert to hours:

600 min = ____ h

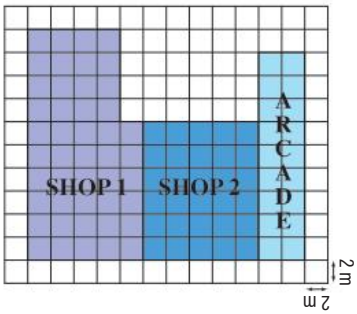
17. [Measuring]

Dave spent 2 hours and 15 minutes at the swimming pool and came back home at 5:30 pm. At what time did he go to the swimming pool?

____ : ____

18. [Perimeter / Area] *

Use the grid and scale to find the total floor area of SHOP 1.

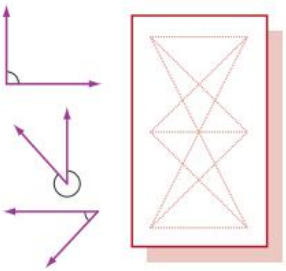


= 4 square metres

____ m^2

19. [Shapes]

Match the angle to its description.



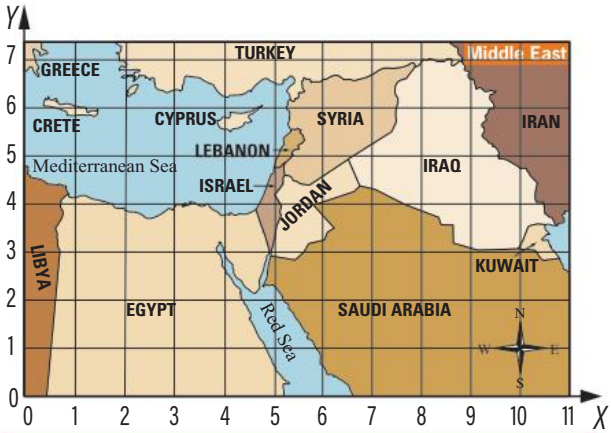
acute

right

reflex

20. [Location / Transformation]

From coordinates (8,5) you fly four units south and six units west on the grid. Which country are you in and what are the coordinates of the landing point?



country: ____ (____ , ____)

21. [Statistics / Probability]

What is the probability of rolling a number less than 3 with one roll of a die? [Give the answer as a fraction in simplest form.]

____

22. [Problem Solving 1] *

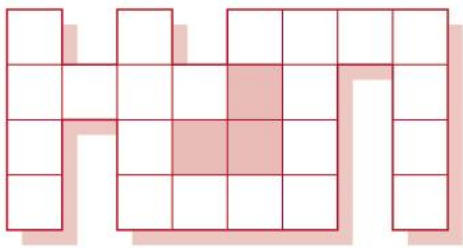
The sum of three consecutive whole numbers is 96. What are the three numbers?

____ , ____ and ____

23. [Problem Solving 2]

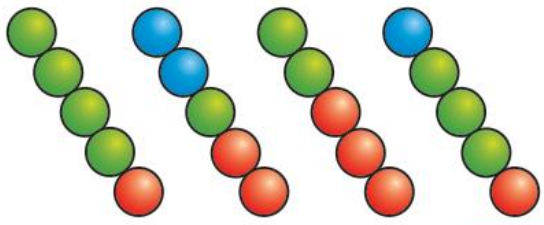
Fill in the cross number puzzle using the following numbers:

4 digits: 2353, 2680, 3350, 3875, 4810, 5044, 6000



24. [Problem Solving 3] *

Each bead has a value according to its colour. The values of the first three strings of beads are given. What is the value of the last string?



22 21 16 ____

MATHS MATE

Term 3 - Sheet 4

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	9	14	8	13	27	21	15	26	12	20
+ 3										

2. [– Whole Numbers to 10]

	9	30	17	16	21	15	12	14	8	33
– 7										

3. [× Whole Numbers to 10]

	2	4	10	1	8	9	6	7	5	3
× 7										

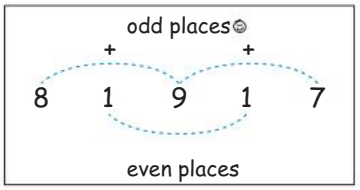
4. [÷ Whole Numbers to 10]

	40	8	12	20	36	32	28	16	24	4
÷ 4										

DIVISIBILITY BY 11

A number is divisible by **11** if the sum of the odd placed digits differs from the sum of the even placed digits by 0 or any multiple of 11.

e.g. 81917 is divisible by 11 because
$8 + 9 + 7 = 24$,
$1 + 1 = 2$ and
$24 - 2 = \mathbf{22}$



5. [Large Number +]

$$\begin{array}{r} 1625 \\ 753 \\ +\ 1520 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 567 \\ -\ 458 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 40 \\ \times\ 1000 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 32 \\ \times\ 62 \\ \hline \end{array}$$

9. [Decimals]

$$\begin{array}{r} 24.19 \\ -\ 13.85 \\ \hline \end{array}$$

10. [Fractions]

$\frac{11}{12} - \frac{4}{12} =$

11. [Decimals / Fractions / Percentages]

Write 90% as a decimal.

12. [Place Value]

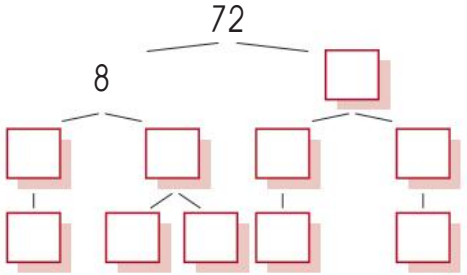
Place in ascending order:
2.32, 3.23, 2.23, 2.33, 3.22

13. [Operations] *

$6 + 12 \div 3 =$

14. [Exploring Numbers]

Complete the factor tree and write 72 as a product of its prime factors.



72 =

15. [Number Patterns / Equations]

$\square \div 12 = 4$

16. [Units of Measurement]

Convert to hours:

$2\frac{1}{2}$ days = ____ h

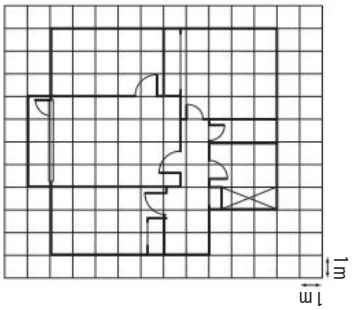
17. [Measuring]

Sophie fell asleep at 10:00 pm. Her alarm clock woke her eight and a half hours later. At what time did the alarm clock ring?

____ : ____

18. [Perimeter / Area] *

Use the grid and scale to find the total area of this apartment plan.

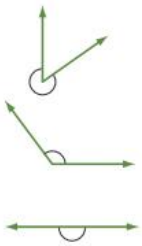


□ = 1 square metre

____ m^2

19. [Shapes]

Match the angle to its description.



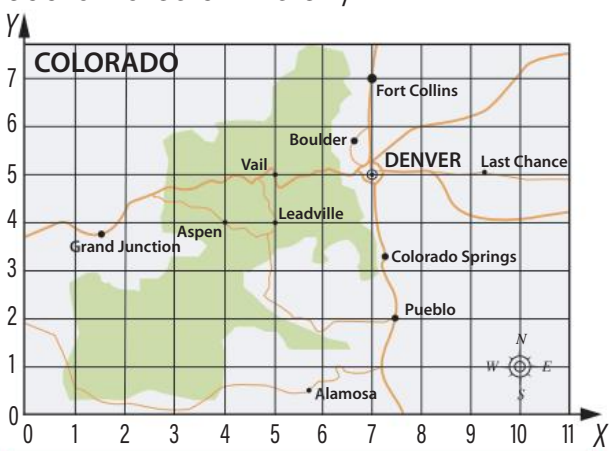
obtuse

reflex

straight

20. [Location / Transformation]

From Aspen you move three units east and three units north on the grid. Which city are you in and what are the coordinates of this city?



city: ____ (____ , ____)

21. [Statistics / Probability]

What is the probability that this spinner will stop on an odd number?

[Give the answer as a fraction.]

____

22. [Problem Solving 1] *

The sum of four consecutive whole numbers is 94. What are the four numbers?

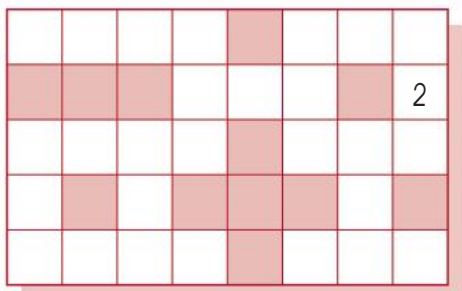
____ , ____ , ____ and ____

23. [Problem Solving 2]

Fill in the cross number puzzle using the following numbers:

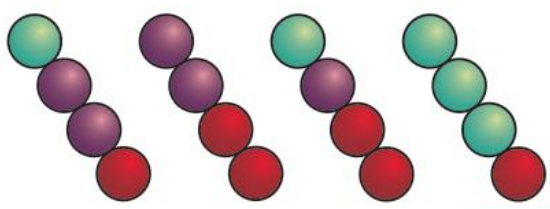
3 digits: 111, 146, 399, 419, 600, 707, 717, 727, 747, 819

4 digits: 1958, 1969, 6100



24. [Problem Solving 3] *

Each bead has a value according to its colour. The values of the first three strings of beads are given. What is the value of the last string?



16 18 21 ____

MATHS MATE

Term 3 - Sheet 5

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	9	21	15	10	14	22	17	23	6	18
+ 3										

2. [– Whole Numbers to 10]

	30	19	18	26	12	13	21	15	17	24
– 9										

3. [× Whole Numbers to 10]

	9	8	7	4	6	1	10	2	3	5
× 4										

4. [÷ Whole Numbers to 10]

	2	3	7	6	8	1	9	10	4	5
÷ 1										

ARCHIMEDES

(287 - 212 B.C.)

Archimedes was born on the island of Sicily. Besides being one of history's greatest mathematicians, he was also an inventor. Engineers today, when designing bridges and skyscrapers, still use the laws he discovered. He also came up with a very good approximation of the value of π.

π ≈ 3.141592.....

5. [Large Number +]

$$\begin{array}{r} 62 \\ 45 \\ +\ 24 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 264 \\ -\ 67 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

6000 ÷ 1000 = ☐

8. [Large Number ×,÷]

☐

$$5\overline{)285}$$

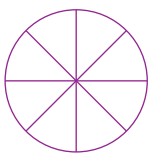
9. [Decimals]

10% GST must be added to a $22 ball. What is the price of the ball after adding $2.20 GST?

$ ☐

10. [Fractions]

Shade the diagram to add the fractions.



$\frac{1}{4} + \frac{3}{8} =$ ☐

11. [Decimals / Fractions / Percentages]

Complete the table:

Decimal	Fraction	Percentage
0.75	$\frac{75}{100}$ OR $\frac{3}{4}$	

12. [Place Value]

Round 2516 to the nearest hundred. ☐

13. [Operations] *

9 – 7 + 4 + 5 = ☐

14. [Exploring Numbers]

Which of the numbers 2, 3, 4, 5 and 6 are factors of 1996?

☐

15. [Number Patterns / Equations]

4, 5, 7, 10, 14, ☐ , ☐

16. [Units of Measurement] *

Which is greater?

70 cm or 8000 mm

17. [Measuring]

How much longer is the trip from Manukau Bus Station to the Auckland Airport International Terminal on a weekday than on Saturday?

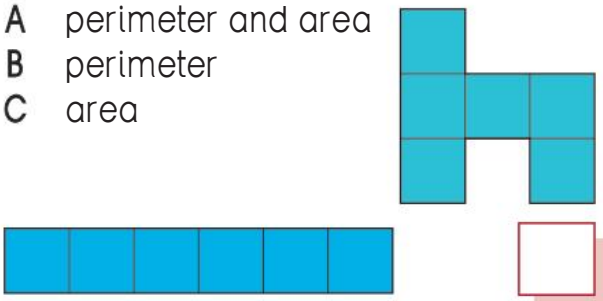
Timetable	Mon to Fri	Sat
	Bus	
Manukau Bus Station	07:00	07:05
Papatoetoe Interchange	07:12	07:13
Domestic Terminal	07:30	07:29
International Terminal	07:33	07:31

min

18. [Perimeter / Area]

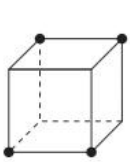
The shapes below have the same:

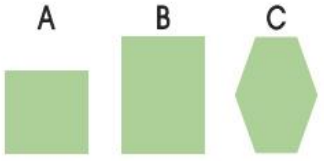
A perimeter and area
B perimeter
C area



19. [Shapes]

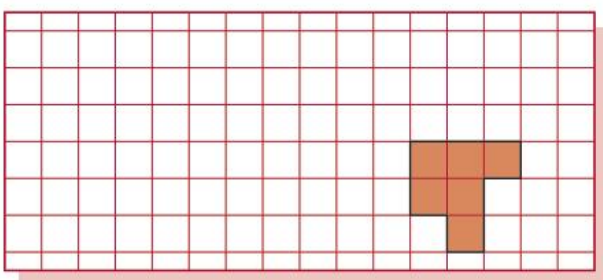
Which shape shows the cross section produced by slicing through the points indicated on the cube?





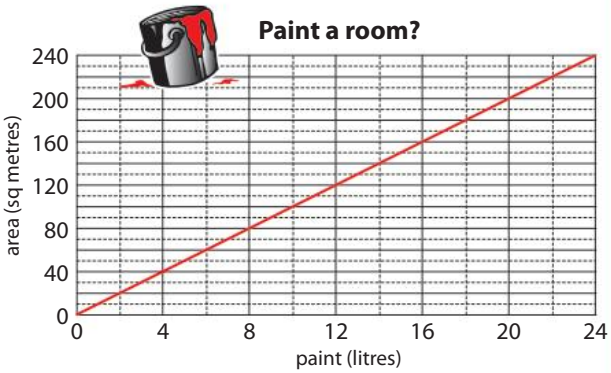
20. [Location / Transformation]

Redraw this shape after translating it 6 units to the left and then 3 units up.



21. [Statistics / Probability]

How much paint would you need to cover 140 square metres of wall area?



L

22. [Problem Solving 1]

Fill in the missing digits in the subtraction.

$$\begin{array}{r} \square\,8 \\ -\ 2\,\square \\ \hline 7\ 2 \end{array}$$

23. [Problem Solving 2] *

I think of a number, divide it by 2 and then add 12. If the result is 20, what was the original number?

24. [Problem Solving 3] *

The table shows the Group B team standings after 2 rounds of the 2022 Soccer World Cup. Which country did Wales play in its third round robin match? [Each team plays each other team in the group once. Three points are awarded for a win, one for a draw and none for a lost match.]

GROUP B TEAMS	MP Matches Played	W Wins	D Draws	L Losses	GF Goals For	GA Goals Against	Pts Points
England	2	1	1	0	6	2	4
Iran	2	1	0	1	4	6	3
USA	2	0	2	0	1	1	2
Wales	2	0	1	1	1	3	1

Wales vs _____

MATHS MATE

Term 3 - Sheet 6

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	18	21	27	6	13	20	12	14	25	19
+ 4										

2. [– Whole Numbers to 10]

	7	12	8	9	26	15	10	14	31	13
– 6										

3. [× Whole Numbers to 10]

	5	9	6	2	1	3	10	4	7	8
× 7										

4. [÷ Whole Numbers to 10]

	20	10	45	40	25	30	15	50	35	5
÷ 5										

ERATOSTHENES

(around 3rd century B.C.)

Almost 2000 years before most people agreed the Earth was round, this Greek mathematician has calculated the circumference of the Earth to be 38000 km. He found this by observing and measuring shadows cast by pillars on different parts of the Earth's surface.

The circumference of the Earth, measured through the two poles, is actually 40000 km.

5. [Large Number +]

$$\begin{array}{r} 4468 \\ +\ 1705 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 243 \\ -\ 149 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$7000 \div 1000 =$ ☐

8. [Large Number ×,÷]

☐

$3\overline{)231}$

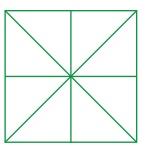
9. [Decimals]

10% GST must be added to a $15 book. What is the price of the book after adding $1.50 GST?

$ ☐

10. [Fractions]

Shade the diagram to subtract the fractions.



$\frac{7}{8} - \frac{1}{2} =$ ☐

11. [Decimals / Fractions / Percentages]

Complete the table:

Decimal	Fraction	Percentage
	$\frac{83}{100}$	83%

12. [Place Value]

Round 4.07 to the nearest whole number. ☐

13. [Operations] *

$6 - 4 + 7 - 3 =$ ☐

14. [Exploring Numbers]

Which of the numbers 2, 3, 4, 5 and 10 are factors of 7230?

☐

15. [Number Patterns / Equations]

2, 10, 17, 23, 28, ☐ , ☐

16. [Units of Measurement] *

Which is greater?

3 t or 4000 kg

17. [Measuring]

What was the actual time of arrival at 42nd St if the 10:39 am train from 125th St was running 3 minutes late? Answer using the 12-hour time format.

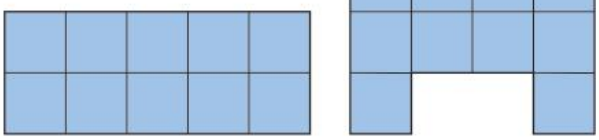
MTA A New York City Transit			
145th St	125th St	59th St	42nd St
Mon to Fri			
10:21 am	10:24 am	10:32 am	10:35 am
10:28 am	10:32 am	10:40 am	10:43 am
10:36 am	10:39 am	10:47 am	10:51 am
10:41 am	10:45 am	10:53 pm	10:57 pm
10:51 am	10:54 pm	11:02 pm	11:05 pm

:

18. [Perimeter / Area]

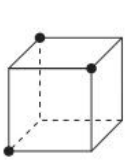
The shapes below have the same:

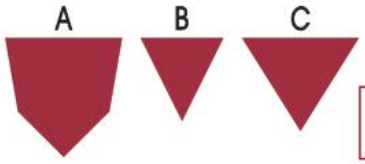
A perimeter and area
B perimeter
C area



19. [Shapes]

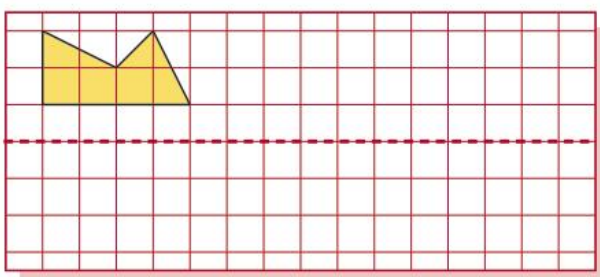
Which shape shows the cross section produced by slicing through the points indicated on the cube?





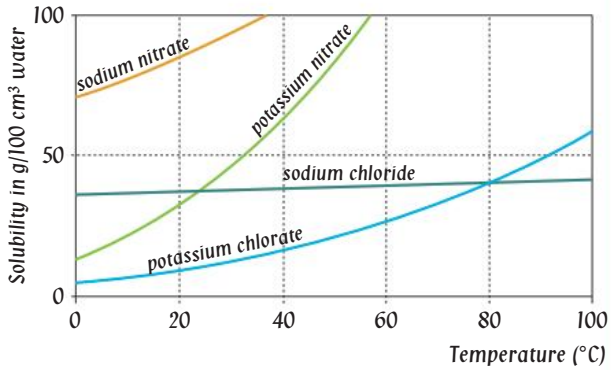
20. [Location / Transformation]

Redraw this shape after reflecting it in the dotted line and then translating it 9 units to the right.



21. [Statistics / Probability]

At what temperature is the solubility of sodium chloride and potassium chlorate the same?



°C

22. [Problem Solving 1]

Fill in the missing digits in the sum.

$$\begin{array}{r} 1\ 6 \\ \square\ \square \\ +\ 5\ 1 \\ \hline 9\ 6 \end{array}$$

23. [Problem Solving 2] *

I think of a number, add 15 and then divide by 4. If the result is 5, what was the original number?

24. [Problem Solving 3] *

The table shows the Group F team standings after 2 rounds of the 2022 Soccer World Cup. Which country did Canada play in its third round robin match? [Each team plays each other team in the group once. Three points are awarded for a win, one for a draw and none for a lost match.]

GROUP F TEAMS	MP Matches Played	W Wins	D Draws	L Losses	GF Goals For	GA Goals Against	Pts Points
Croatia	2	1	1	0	4	1	4
Morocco	2	1	1	0	2	0	4
Belgium	2	1	0	1	1	2	3
Canada	2	0	0	2	1	5	0

Canada vs _____

MATHS MATE

Term 3 - Sheet 7

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	11	12	23	15	8	20	9	14	17	26
+ 5										

2. [– Whole Numbers to 10]

	17	8	15	16	23	34	12	10	9	11
– 7										

3. [× Whole Numbers to 10]

	5	7	1	6	2	3	10	9	4	8
× 3										

4. [÷ Whole Numbers to 10]

	18	36	48	24	6	42	30	60	12	54
÷ 6										

SAMUEL F B MORSE

(1791 - 1872)

In 1844 Samuel Morse won a competition by transmitting the message, "What hath God wrought" using a single wire from Washington to Baltimore. Earlier plans to use a system of 26 wires (one per letter) were abandoned because of cost.

The use of Morse Code was discontinued worldwide in the year 2000.

5. [Large Number +]

$$\begin{array}{r} 923 \\ 3046 \\ +\,1908 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 633 \\ -\,238 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$44\,000 \div 1000 =$

8. [Large Number ×,÷]

$8 \overline{)\,592}$

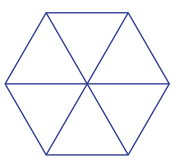
9. [Decimals]

The price of a tent is $135.90 including GST. If the price before GST is $123.55, what is the GST?

$

10. [Fractions]

Shade the diagram to add the fractions.



$\frac{2}{6} + \frac{1}{2} =$

11. [Decimals / Fractions / Percentages]

Complete the table:

Decimal	Fraction	Percentage
	$\frac{7}{10}$	70%

12. [Place Value]

Round 4.56 to the nearest tenth.

13. [Operations] *

$(7 + 2) \times 3 =$

14. [Exploring Numbers]

Which of the numbers 2, 3, 4, 6 and 9 are factors of 1881?

15. [Number Patterns / Equations]

30, 29, 27, 24, 20, __ , __

16. [Units of Measurement] *

Which is greater?

5000 mL or 40 L

17. [Measuring]

Puffing Billy is departing Belgrave station at 11:10 am. How long does it take to arrive at Lakeside station?

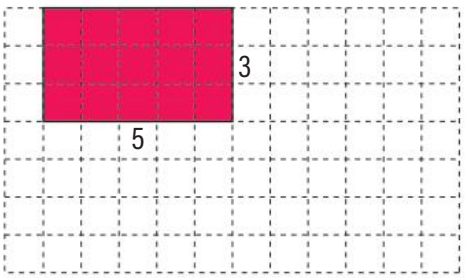
min

FROM BELGRAVE

Belgrave dep:	**10.30**	**11.10**	**12.15**	**1.15**	**2.30**
Menzies Crk arr:	10.53	11.33	12.47	1.47	2.53
Menzies Crk dep:	11.05	11.38	1.05	1.55	3.00
Emerald dep:	11.20	11.53	1.15	2.10	3.20
Lakeside arr:	11.30	12.08	1.30	2.20	3.30
Lakeside dep:	...	**12.20**	...	...	...
Cockatoo dep:	...	12.35	...	...	...
Gembrook arr:	...	**1.00**	...	...	...

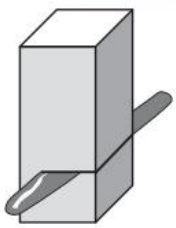
18. [Perimeter / Area]

Double the length and the width of this rectangle. How many times bigger is the area of the new rectangle compared to the original rectangle?



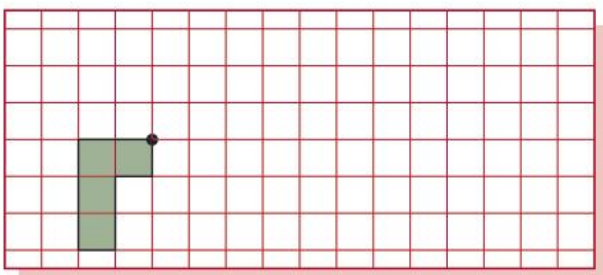
19. [Shapes]

Name the shape of the cross-section obtained when cutting through this square prism, parallel to the base.



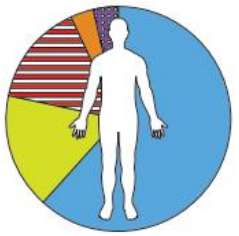
20. [Location / Transformation]

Redraw this shape after turning it 90° clockwise around the marked point and and then translating it 9 units right.



21. [Statistics / Probability]

Protein makes up about 15% of the human body. Of the other components which substance makes up about 15%?



Water
Protein
Fat
Nitrogen
Other

Composition of the Human Body

22. [Problem Solving 1]

Fill in the missing digits in the subtraction.

$$\begin{array}{r} \square\,9 \\ -\ 5\,\square \\ \hline 2\ 3 \end{array}$$

23. [Problem Solving 2] *

I think of a number, multiply it by 3 and then divide by 2. If the result is 18, what was the original number?

24. [Problem Solving 3] *

The table shows the Group G team standings after 2 rounds of the 2022 Soccer World Cup. Which country did Cameroon play in its third round robin match? [Each team plays each other team in the group once. Three points are awarded for a win, one for a draw and none for a lost match.]

GROUP G TEAMS	MP Matches Played	W Wins	D Draws	L Losses	GF Goals For	GA Goals Against	Pts Points
Brazil	2	2	0	0	3	0	6
Switzerland	2	1	0	1	1	1	3
Cameroon	2	0	1	1	3	4	1
Serbia	2	0	1	1	3	5	1

Cameroon vs _____

MATHS MATE

Term 3 - Sheet 8

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	8	1	26	10	13	29	12	24	5	17
+ 7										

2. [– Whole Numbers to 10]

	31	8	9	13	10	15	24	7	16	12
– 5										

3. [× Whole Numbers to 10]

	1	7	5	10	2	9	3	6	8	4
× 6										

4. [÷ Whole Numbers to 10]

	18	30	12	3	9	15	21	6	24	27
÷ 3										

FIBONACCI

(1170 - 1230)

The number sequence 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, ... was made famous by Fibonacci. Except for the 0 and 1, each number in the sequence is the sum of the two numbers that come before it.

The Fibonacci numbers occur often in nature, e.g. they show growth rates in rabbit populations.

5. [Large Number +]

$$\begin{array}{r} 1532 \\ 7036 \\ +\ 1375 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 586 \\ -\ 387 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$82\,000 \div 1000 =$ ☐

8. [Large Number ×,÷]

$7 \overline{)322}$ ☐

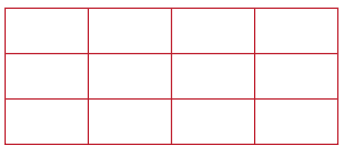
9. [Decimals]

The price of a pair of shoes is $230 including GST. If the price before GST is $209.09, what is the GST?

$ ☐

10. [Fractions]

Shade the diagram to subtract the fractions.



$\frac{2}{3} - \frac{1}{12} =$ ☐

11. [Decimals / Fractions / Percentages]

Complete the table:

Decimal	Fraction	Percentage
0.25		

12. [Place Value]

Round 3.872 to the nearest hundredth. ☐

13. [Operations] *

$(9 - 6) \times 5 =$ ☐

14. [Exploring Numbers]

Which of the numbers 2, 3, 4, 5, 6 and 10 are factors of 1900?

☐

15. [Number Patterns / Equations]

45, 43, 39, 33, ☐ , ☐

16. [Units of Measurement] *

Which is greater?

600 g or 5 kg

17. [Measuring]

What is the difference between the the starting times of the low tides on Sunday morning and on Saturday morning? [Disregard the 24 h difference.]

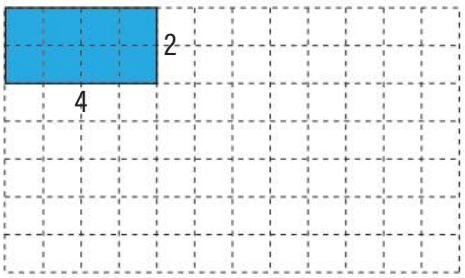
min

Gold Coast (QLD) Tides

SAT Nov 2 2024		SUN Nov 3 2024	
Low	1:50 am 0.11 m	Low	2:17 am 0.14 m
High	8:34 am 1.54 m	High	9:07 am 1.56 m
Low	2:49 pm 0.24 m	Low	3:28 pm 0.26 m
High	8:32 pm 1.16 m	High	9:07 pm 1.09 m

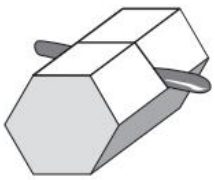
18. [Perimeter / Area]

Triple the length and the width of this rectangle. How many times bigger is the area of the new rectangle compared to the original rectangle?



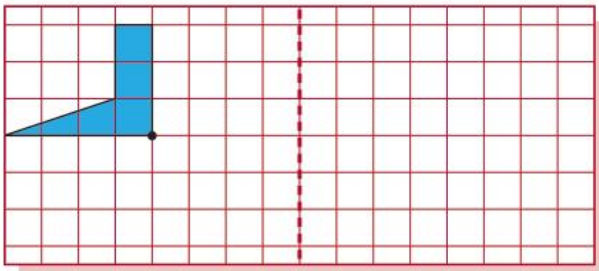
19. [Shapes]

Name the shape of the cross-section obtained when cutting through this prism, parallel to the base.



20. [Location / Transformation]

Redraw this shape after turning it 180° around the marked point and then reflecting it in the dotted line.



21. [Statistics / Probability]

What reason accounts for a quarter of students learning a foreign language in Britain?

Reasons for Learning a Foreign Language in Britain

- Travel
- Buying property overseas
- Business
- Personal development
- Social contact
- Other

22. [Problem Solving 1]

Fill in the missing digits in the sum.

$$\begin{array}{r} 1\ 7 \\ \square\ \square \\ +\ 3\ 6 \\ \hline 9\ 5 \end{array}$$

23. [Problem Solving 2] *

I think of a number, multiply it by 4 and then divide by 3. If the result is 12, what was the original number?

24. [Problem Solving 3] *

The table shows the Group E team standings after 2 rounds of the 2022 Soccer World Cup. Which country did Japan play in its third round robin match? [Each team plays each other team in the group once. Three points are awarded for a win, one for a draw and none for a lost match.]

GROUP E TEAMS	MP Matches Played	W Wins	D Draws	L Losses	GF Goals For	GA Goals Against	Pts Points
Spain	2	1	1	0	8	1	4
Japan	2	1	0	1	2	2	3
Costa Rica	2	1	0	1	1	7	3
Germany	2	0	1	1	2	3	1

Japan vs _____

MATHS MATE

Name: .....

Class: .....

Teacher: .....

Worksheet Results

Term 4

		Sheet 1	Sheet 2	Sheet 3	Sheet 4	Skill Builder links	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Skill Builder links
NUMBER & ALGEBRA	1. [+ Whole Numbers to 10]	1	1	1	1	1.1,2,3,4	1	1	1	1	1.1,2,3,4
	2. [– Whole Numbers to 10]	2	2	2	2	2.1,2,3,4,5	2	2	2	2	2.1,2,3,4,5
	3. [× Whole Numbers to 10]	3	3	3	3	3.3,4,5	3	3	3	3	3.1,2,3,4
	4. [÷ Whole Numbers to 10]	4	4	4	4	4.1,2	4	4	4	4	4.1,2
	5. [Large Number +]	5	5	5	5	5.2,3	5	5	5	5	5.2,3
	6. [Large Number –]	6	6	6	6	6.2	6	6	6	6	6.2
	7. [Powers of 10 ×,÷]	7	7	7	7	7.1,2	7	7	7	7	7.3,4
	8. [Large Number ×,÷]	8	8	8	8	8.3	8	8	8	8	8.5
	9. [Decimals]	9	9	9	9	9.12	9	9	9	9	9.13
	10. [Fractions]	10	10	10	10	10.16	10	10	10	10	10.5,6,17,18
	11. [Dec. / Frac. / Percentages]	11	11	11	11	11.15	11	11	11	11	11.16
	12. [Place Value]	12	12	12	12	12.10,12	12	12	12	12	12.12
	13. [Operations]	13	13	13	13	13.8	13	13	13	13	13.8
	14. [Exploring Numbers]	14	14	14	14	14.12,13	14	14	14	14	14.14
	15. [Number Patterns / Equations]	15	15	15	15	15.10	15	15	15	15	15.11
MEASUREMENT & SPACE	16. [Units of Measurement]	16	16	16	16	16.3,4,5,7	16	16	16	16	16.8
	17. [Measuring]	17	17	17	17	17.7	17	17	17	17	17.6
	18. [Perimeter / Area]	18	18	18	18	18.5	18	18	18	18	18.7
	19. [Shapes]	19	19	19	19	19.6,8	19	19	19	19	19.11
	20. [Location / Transformation]	20	20	20	20	20.9	20	20	20	20	20.9
S & P	21. [Statistics / Probability]	21	21	21	21	21.15	21	21	21	21	21.7,16
PROBLEM SOLVING	22. [Problem Solving 1]	22	22	22	22	Hints & Solutions	22	22	22	22	Hints & Solutions
	23. [Problem Solving 2]	23	23	23	23	Hints & Solutions	23	23	23	23	Hints & Solutions
	24. [Problem Solving 3]	24	24	24	24	Hints & Solutions	24	24	24	24	Hints & Solutions
	Total Correct										

MATHS MATE

Term 4 - Sheet 1

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	24	9	33	11	30	7	18	12	6	25
+ 6										

2. [– Whole Numbers to 10]

	12	9	18	17	10	34	13	41	26	55
– 7										

3. [× Whole Numbers to 10]

	3	6	1	9	7	2	10	5	4	8
× 8										

4. [÷ Whole Numbers to 10]

	40	15	25	10	45	50	5	30	35	20
÷ 5										

5. [Large Number +]

$$\begin{array}{r} 78 \\ +\,935 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 770 \\ -\,\ 89 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 360 \\ \times\ \ 10 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 39 \\ \times\,63 \\ \hline \\ \hline \end{array}$$

9. [Decimals]

$3.4 \times 10 =$

10. [Fractions]

Of the 18 plants in the garden, one third are roses. How many are roses?

$\frac{1}{3}$ of $18 =$

11. [Decimals / Fractions / Percentages]

Calculate 20% of $100.

$

12. [Place Value] *

Estimate the difference between 109 and 71 by rounding to the nearest ten before subtracting.

13. [Operations] *

$9 \div (3 \div 3) =$

14. [Exploring Numbers]

Which temperature is lower?

A 21°C below zero

B 18°C below zero

15. [Number Patterns / Equations]

6.2, 5.9, 5.6, 5.3, __ , __

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

48 x 362 = 17 376

Check:

(4+8) x (3+6+2) = 1+7+3+7+6

12 x 11 = 24

(1+2) x (1+1) = 2+4

3 x 2 = 6

Yes, the answer is probably correct.

Could these be correct?

a) 46 x 129 = 5934

b) 199 x 1997 = 97 403

Answers: a) may be correct b) definitely wrong

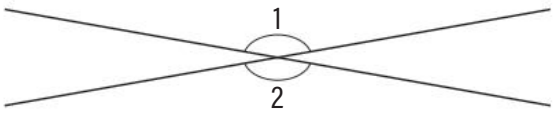
16. [Units of Measurement] *

Circle the longest distance.

3000 cm **3 m** **3 km**

17. [Measuring]

Measure the marked angles below:

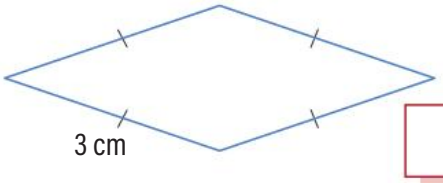


Angle 1 = ☐ Angle 2 = ☐

These angles are: ☐

18. [Perimeter / Area]

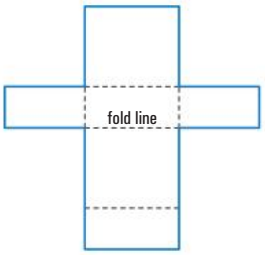
Find the perimeter of the rhombus.



☐ cm

19. [Shapes]

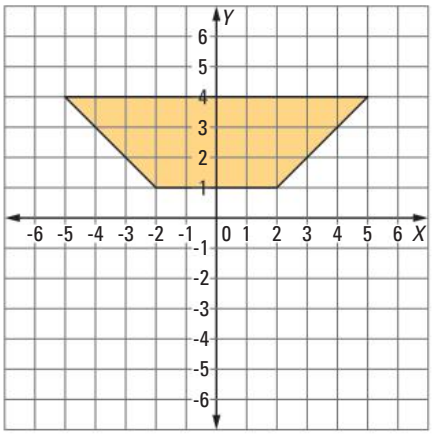
What 3-dimensional shape can this net be used to make?



☐

20. [Location / Transformation]

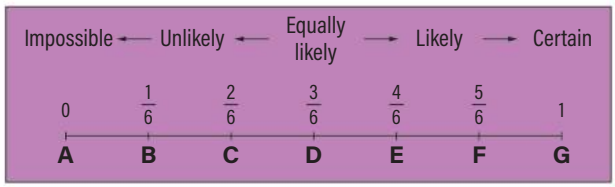
Redraw this trapezium after reflecting it in the *X*-axis.



21. [Statistics / Probability]

On the probability scale below, which letter A to G best represents the probability of this event?

"A number greater than 5 turns up when a die is rolled."



☐

22. [Problem Solving 1]

Fill in the missing number.

$12 \times$ ☐ $+ 6 = 42$

23. [Problem Solving 2]

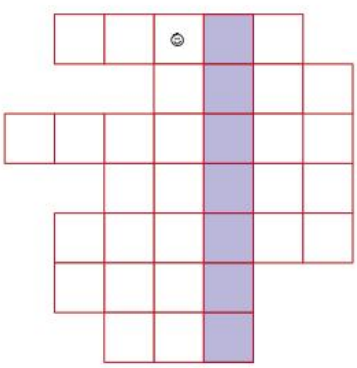
Fill in the magic square. [Hint: Every row, column and diagonal has the same sum.]

4		
	6	
	1	8

24. [Problem Solving 3]

Fill in the answers about time correctly, and you will find the name of a long interval of time in the vertical shaded box.

Hangs on a wall
7 days
3600 every hour
On your wrist
60 seconds
60 minutes
1440 minutes



MATHS MATE

Term 4 - Sheet 2

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	14	32	19	10	15	28	7	13	31	16
+ 4										

2. [– Whole Numbers to 10]

	11	26	8	5	12	33	14	9	40	7
– 3										

3. [× Whole Numbers to 10]

	9	7	8	6	5	3	4	1	2	10
× 5										

4. [÷ Whole Numbers to 10]

	64	40	8	80	72	56	24	32	16	48
÷ 8										

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

46 x 92 x 39 = 165 048

Check: 9's can be thrown out

(4+6) x 2 x 3 = 1+6+5+0+4+8

10 x 2 x 3 = 24

1 x 2 x 3 = 2+4

2 x 3 = 6

Yes, the answer is probably correct.

Could these be correct?

a) 21 x 85 x 37 = 69 045

b) 220 x 209 = 45 980

Answers: a) definitely wrong b) may be correct

5. [Large Number +]

$$\begin{array}{r} 1\,6\,7\,9 \\ +\ \ 8\,4\,0 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 9\,2\,4 \\ -\ \ 4\,9 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 9\,0\,0 \\ \times\,1\,0\,0 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 8\,3 \\ \times\,7\,2 \\ \hline \end{array}$$

9. [Decimals]

$1.12 \times 10 =$

10. [Fractions]

Of the 36 books on the shelf, one ninth are fiction. How many books are fiction?

$\frac{1}{9}$ of 36 =

11. [Decimals / Fractions / Percentages]

Calculate 10% of $80.

$

12. [Place Value] *

Estimate the product of 48 and 53 by rounding to the nearest ten before multiplying.

13. [Operations] *

$30 \div (5 \times 2) =$

14. [Exploring Numbers]

Which scuba diver is closest to the surface?

A 25 m below sea level

B 12 m below sea level

15. [Number Patterns / Equations]

4, 5.1, 6.2, 7.3, 8.4, __ , __

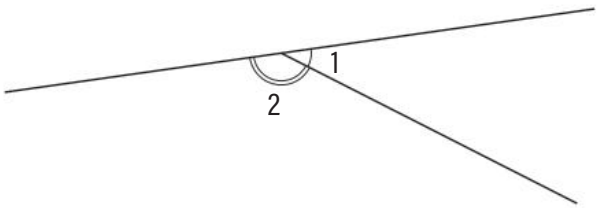
16. [Units of Measurement] *

Circle the greatest mass.

10 t 40 000 g 6000 kg

17. [Measuring]

Measure the marked angles below:

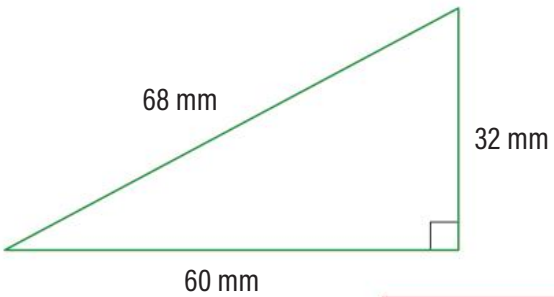


Angle 1 = ☐ Angle 2 = ☐

The sum of these angles is: ☐

18. [Perimeter / Area]

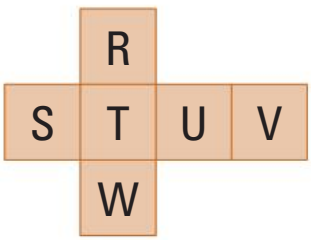
Find the perimeter of the triangle.



☐ mm

19. [Shapes]

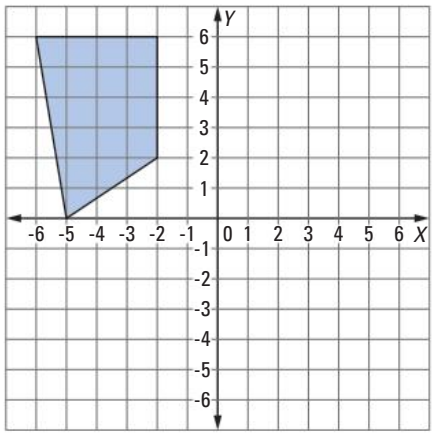
This net forms a cube when folded. Which letter is on the face opposite to letter V?



☐

20. [Location / Transformation]

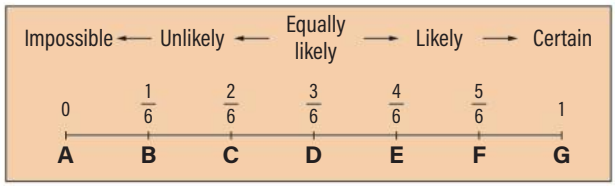
Redraw this quadrilateral after reflecting it in the *Y*-axis.



21. [Statistics / Probability]

On the probability scale below, which letter A to G best represents the probability of this event?

"A number less than 7 turns up when a die is rolled."



☐

22. [Problem Solving 1]

Fill in the missing number.

☐ ÷ 5 – 3 = 6

23. [Problem Solving 2]

Fill in the magic square. [Hint: Every row, column and diagonal has the same sum.]

		4
	6	
8	7	

24. [Problem Solving 3] *

When you multiply the ages of Rob and Bec the result is 288. If at least one of them is a teenager, what is the sum of their ages?

[Hint: List the factors of 288.]

☐

MATHS MATE

Term 4 - Sheet 3

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	33	20	29	8	31	24	12	35	17	6
+ 10										

2. [– Whole Numbers to 10]

	14	22	30	15	16	17	38	13	21	19
– 8										

3. [× Whole Numbers to 10]

	4	8	5	7	1	6	2	3	10	9
× 4										

4. [÷ Whole Numbers to 10]

	70	28	49	56	35	63	42	14	7	21
÷ 7										

MULTIPLICATION

(Check Your Answer)

e.g. Could this answer be correct?

31 x 104.8 = 3248.8

Check:

(3+1) x (1+4+8) = 3+2+4+8+8

4 x (1+3) = 2+5

4 x 4 = 7

1+6 = 7

Yes, the answer is probably correct.

Could these be correct?

a) 12.2 x 16.5 = 201.3

b) 4.05 x 19.7 = 79.785

Answers: a) may be correct b) may be correct

5. [Large Number +]

$$\begin{array}{r} 4212 \\ 1045 \\ +\ 2835 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 4080 \\ -\ \ 507 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 80 \\ \times 1000 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 58 \\ \times 73 \\ \hline \\ \hline \end{array}$$

9. [Decimals]

5.75 × 100 =

10. [Fractions] *

Three quarters of the 20 farms breed cattle. How many farms breed cattle?

$\frac{3}{4}$ of 20 =

11. [Decimals / Fractions / Percentages]

Calculate 50% of $30.

$

12. [Place Value] *

Estimate the sum of 10.38 and 4.71 by rounding to the nearest whole number before adding.

13. [Operations] *

12 ÷ (2 × 6) =

14. [Exploring Numbers]

Write as a positive or negative number:

nine floors above ground level.

15. [Number Patterns / Equations]

$\frac{40}{11}, \frac{37}{11}, \frac{34}{11}, \frac{31}{11},$ __ , __

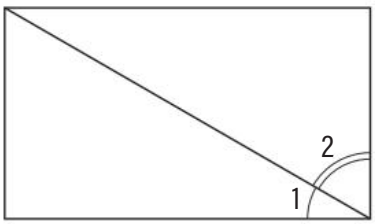
16. [Units of Measurement] *

Circle the smallest capacity.

8000 mL **7 L** **900 mL**

17. [Measuring]

Measure the marked angles below:

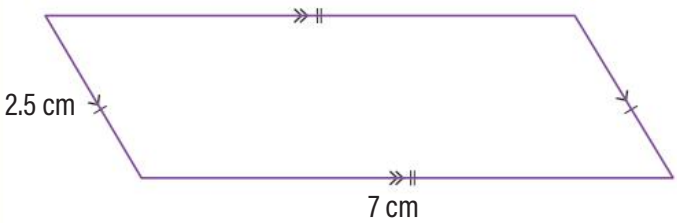


Angle 1 = ☐ Angle 2 = ☐

The sum of these angles is: ☐

18. [Perimeter / Area]

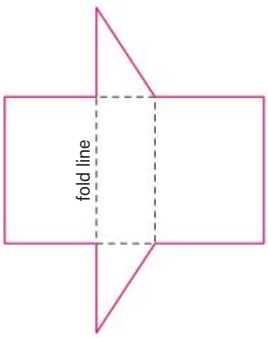
Find the perimeter of the parallelogram.



☐ cm

19. [Shapes]

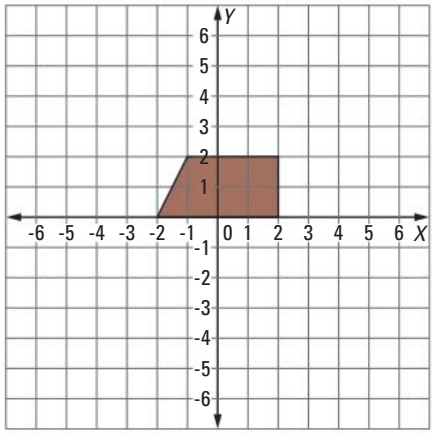
What 3-dimensional shape can this net be used to make?



☐

20. [Location / Transformation]

Redraw this trapezium after multiplying its coordinates by 3 (enlargement of factor 3).

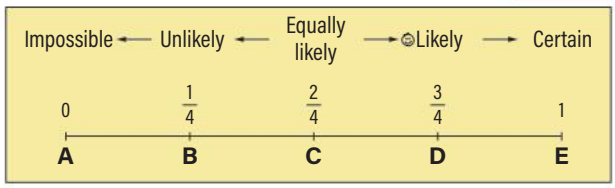


21. [Statistics / Probability]

On the probability scale below, which letter A to E best represents the probability of this event?

"An even number is drawn at random from the numbers 10 to 19."

☐



22. [Problem Solving 1]

Fill in the missing number.

8 × ☐ + 4 = 60

23. [Problem Solving 2]

Fill in the magic square.

[Hint: Every row, column and diagonal has the same sum.]

12	4	
	9	
	14	

24. [Problem Solving 3] *

A bookshop sold 200 books over the internet in its first year of business. Since then the number of books sold has doubled every year. What was the bookshop's profit in the sixth year given the yearly profit formula below?

Yearly profit = books sold × $2 – $1000

$ ☐

MATHS MATE

Term 4 - Sheet 4

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	12	39	24	17	36	20	31	13	8	25
+ 2										

2. [– Whole Numbers to 10]

	10	35	24	6	27	9	13	32	31	28
– 4										

3. [× Whole Numbers to 10]

	9	10	4	5	2	3	7	6	8	1
× 10										

4. [÷ Whole Numbers to 10]

	2	14	12	6	8	16	10	20	18	4
÷ 2										

DIVISION

(Check Your Answer)

e.g. Could this answer be correct?

45 980 ÷ 209 = 220

Check: 9's can be thrown out

(4+5+8) ÷ 2 = 2+2

(1+7) ÷ 2 = 4

8 ÷ 2 = 4

Yes, the answer is probably correct.

Could these be correct?

a) 19 646 ÷ 517 = 38

b) 3525 ÷ 47 = 65

Answers: a) may be correct b) definitely wrong

5. [Large Number +]

$$\begin{array}{r} 410 \\ 277 \\ 306 \\ +\ 526 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 7305 \\ -\ 428 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$$\begin{array}{r} 570 \\ \times\ 1000 \\ \hline \end{array}$$

8. [Large Number ×,÷]

$$\begin{array}{r} 64 \\ \times\ 59 \\ \hline \end{array}$$

9. [Decimals]

9.6 × 100 =

10. [Fractions] *

Three fifths of the $500 raised by the school charity event was collected by grade 6 students. How much money is this?

$\frac{3}{5}$ of $500 = $

11. [Decimals / Fractions / Percentages]

Calculate 25% of $40.

$

12. [Place Value] *

Estimate the difference between 9.25 and 6.5 by rounding to the nearest whole number before subtracting.

13. [Operations] *

(9 – 2) × 5 =

14. [Exploring Numbers]

Write as a positive or negative number:

a debt of $100.

15. [Number Patterns / Equations]

$1, 1\frac{1}{7}, 1\frac{2}{7}, 1\frac{3}{7},$ __ , __

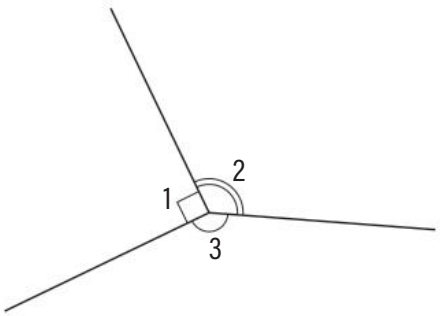
16. [Units of Measurement] *

Circle the longest time.

1200 s **half an hour** **40 min**

17. [Measuring]

Measure the marked angles below:



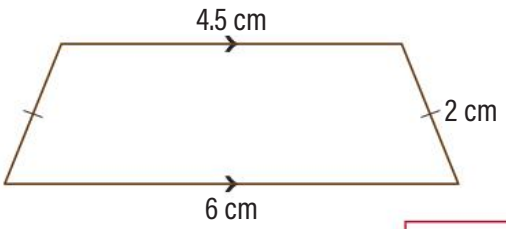
Angle 1 = ☐ Angle 2 = ☐

Angle 3 = ☐

The sum of these angles is: ☐

18. [Perimeter / Area]

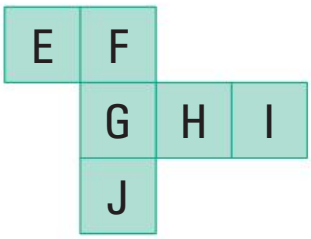
Find the perimeter of the trapezium.



☐ cm

19. [Shapes]

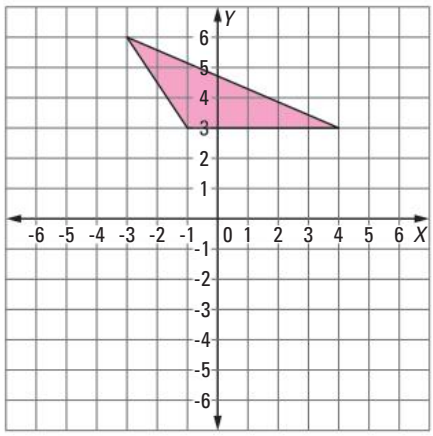
This net forms a cube when folded. Which letter is on the face opposite to letter E?



☐

20. [Location / Transformation]

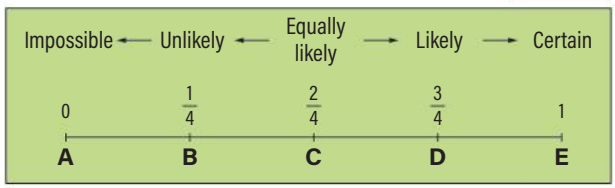
Redraw this triangle after rotating it 180° around the point of coordinates (−1,3).



21. [Statistics / Probability]

On the probability scale below, which letter A to E best represents the probability of this event?

"A number divisible by 3 is drawn at random from the numbers 1 to 8." ☐



22. [Problem Solving 1]

Fill in the missing number.

4 + 36 ÷ ☐ = 8

23. [Problem Solving 2]

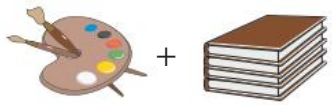
Fill in the magic square.

[Hint: Every row, column and diagonal has the same sum.]

12	16	
	15	
	14	

24. [Problem Solving 3] *

How much is one book according to the diagram?



$ ☐

MATHS MATE

Term 4 - Sheet 5

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	37	20	5	28	16	23	12	31	14	9
+ 5										

2. [– Whole Numbers to 10]

	11	17	36	13	14	48	15	20	29	32
– 10										

3. [× Whole Numbers to 10]

	3	6	9	1	7	2	10	5	4	8
× 7										

4. [÷ Whole Numbers to 10]

	40	16	28	32	20	36	24	8	4	12
÷ 4										

MAGIC NUMBERS

- Take any 4-digit number with 4 different digits. (e.g. 3, 1, 7 & 9)
- Make the largest number you can. (9731)
- Then make the smallest number you can. (1379)
- Subtract it from your large number.

  9731 – 1379 = 8352
- Now take this answer and repeat the process. (8532 – 2358)

  (If your answer has only 3 digits, place a zero at the front.)
- What number will you always end up with?

5. [Large Number +]

$$\begin{array}{r} 5489 \\ +\ 3737 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 1000 \\ -\ \ 243 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

20 900 ÷ 100 =

8. [Large Number ×,÷]

$4\overline{)3300}$

9. [Decimals]

$$\begin{array}{r} 12.1 \\ \times\ \ \ 4 \\ \hline \end{array}$$

10. [Fractions]

Write the mixed number shown by the arrow.

11. [Decimals / Fractions / Percentages]

If a $200 pair of shoes is reduced by 10%, what is the discount? $

12. [Place Value] *

Estimate the total cost by rounding each amount to the nearest hundred before adding:

$79.00 + $96.00 + $309.00 + + $112.00

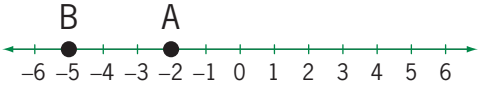
$

13. [Operations] *

15 – 5 – (2 + 4) =

14. [Exploring Numbers]

What numbers are shown at points A and B?



A = B =

15. [Number Patterns / Equations]

$\frac{1}{2}$ of ☐ = 7

16. [Units of Measurement] *

The average uncooked potato has a mass of 150 g. How many potatoes would you expect to find in a 3 kg bag?

17. [Measuring] *

The flight to Los Angeles was scheduled for 8:45 am, but was delayed 95 minutes due to fog on the runway. What time did the flight depart? Answer using the 12-hour time format.

:

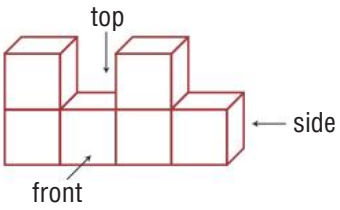
18. [Perimeter / Area]

Find the area of this rectangular door.

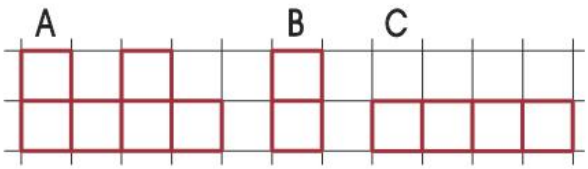
[Area = length × width]

cm²

19. [Shapes]

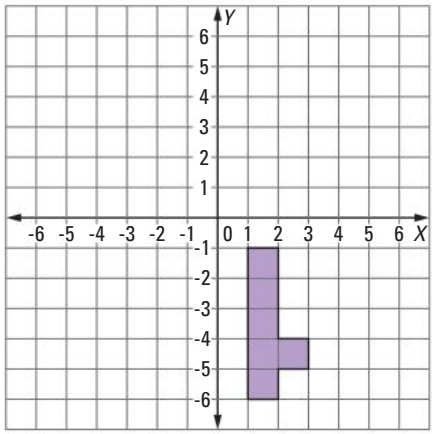


Which of the 2-dimensional shapes below is the side view of this 3-dimensional shape?



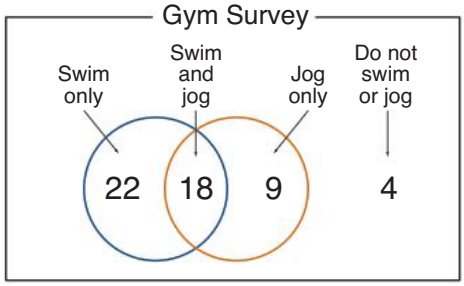
20. [Location / Transformation]

Redraw this shape after translating it 7 units up and 5 units left.



21. [Statistics / Probability]

Out of all those surveyed at the gym, how many people jog as part of or all of their exercise?



22. [Problem Solving 1] *

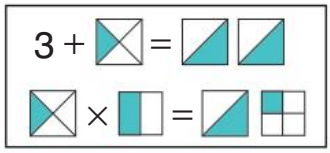
Which deal costs less per gram?

A $5 for 500 g

B $3 for 250 g

23. [Problem Solving 2] *

Each flag represents a different digit. Can you find the solution to the cipher?



= , = , = , =

24. [Problem Solving 3]

Fill in the missing digits, using the digits 1 to 9.

$$\begin{array}{r} 1\square 9 \\ \times \quad 6 \\ \hline \square 5\square \end{array}$$

MATHS MATE

Term 4 - Sheet 6

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	16	32	25	11	39	30	23	17	24	18
+ 9										

2. [– Whole Numbers to 10]

	14	12	30	15	16	17	28	13	11	19
– 8										

3. [× Whole Numbers to 10]

	4	1	3	9	10	5	8	2	6	7
× 2										

4. [÷ Whole Numbers to 10]

	10	80	90	30	70	60	50	100	40	20
÷ 10										

MOEBIUS MAGIC

A Mathematician confided,
That a Moebius band
is one sided,
And you'll get quite a laugh,
if you cut one in half,
for it stays in one piece
when divided!

- Draw a line down the middle of a long strip of paper.
- Make one twist in the strip and glue the ends together to form a band.
- Cut the band along the line you drew down the middle of your strip.
- Try with no twists.
- Try with two twists.

5. [Large Number +]

$$\begin{array}{r} 3457 \\ 3044 \\ +\ \ 353 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 4205 \\ -\ 2174 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$3100 \div 10 =$

8. [Large Number ×,÷]

$8\overline{)9240}$

9. [Decimals]

$$\begin{array}{r} 24.2 \\ \times\ \ 3 \\ \hline \end{array}$$

10. [Fractions]

Shade the triangles to show that $2\frac{2}{3} = \frac{8}{3}$

11. [Decimals / Fractions / Percentages]

If a $6000 TV is reduced by 25%, what is the discount? $

12. [Place Value] *

Estimate the perimeter of a rectangular yard 6.1 m by 7.7 m by first rounding to the nearest metre. m

13. [Operations] *

$6 - (8 - 3) + 3 =$

14. [Exploring Numbers]

What numbers are shown at points A and B?

A = B =

15. [Number Patterns / Equations]

$\frac{1}{2}$ of ☐ = 15

16. [Units of Measurement] *

A water tanker with a 5000 L capacity needed 3 deliveries to fill a new swimming pool. How many litres of water did the pool hold?

L

17. [Measuring] *

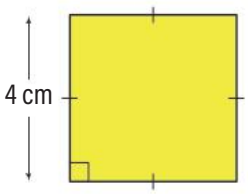
Teams in the Tour de France start at 5 minute intervals. The first team leaves at 2:15 pm. There are 21 teams. At what time does the final team depart? Answer using the 12-hour time format.

:

18. [Perimeter / Area]

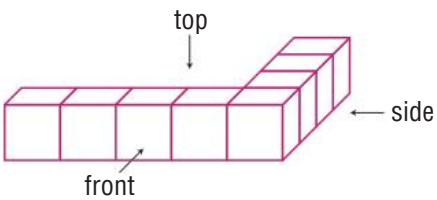
Find the area of this square.

[Area = length × length]

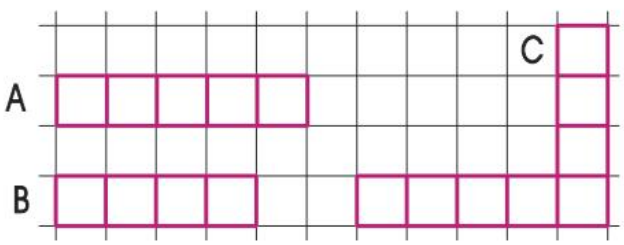


cm^2

19. [Shapes]

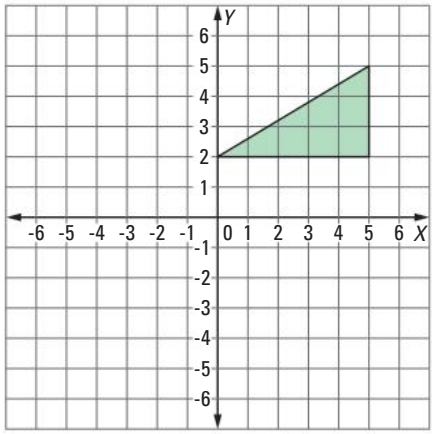


Which of the 2-dimensional shapes below is the front view of this 3-dimensional shape?



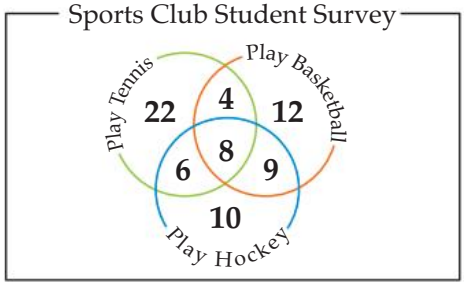
20. [Location / Transformation]

Redraw this triangle after rotating it 90° clockwise around the point of coordinates (0,2).



21. [Statistics / Probability]

Out of all the students surveyed at the sports club, a total of forty play tennis. How many of the students who play tennis also play basketball and hockey?



22. [Problem Solving 1] *

Which deal costs less per metre?

A $1.50 for 15 m

B $5 for 45 m

23. [Problem Solving 2] *

When Tony has his birthday tomorrow, his age in months will be the same as his grandfather's age in years. How old will Tony be if their combined ages will be 78?

24. [Problem Solving 3]

Fill in the missing digits in the multiplication.

$$\begin{array}{r} 2\square 6 \\ \times \quad 3 \\ \hline \square 3\square \end{array}$$

MATHS MATE

Term 4 - Sheet 7

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	19	10	15	7	31	24	38	22	33	16
+ 6										

2. [– Whole Numbers to 10]

	18	15	19	12	14	10	27	33	11	26
– 6										

3. [× Whole Numbers to 10]

	10	6	4	5	2	1	7	3	8	9
× 6										

4. [÷ Whole Numbers to 10]

	14	63	21	42	56	28	7	49	35	70
÷ 7										

MAGIC NUMBERS

- Think of a number from 2 to 10.
- Multiply it by 9
- Add the two digits
- Subtract 5
- If your answer is 1, think of the letter A; if it is 2 think of the letter B and so on.
- Think of a country that begins with this letter.
- Think of the next letter in the alphabet.
- Think of a large animal that begins with this letter.
- Think of the colour of this animal.
- Are you thinking of a large grey elephant from Denmark?

5. [Large Number +]

$$\begin{array}{r} 612 \\ 65 \\ 987 \\ +\ \ 23 \\ \hline \square \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 3765 \\ -\ 896 \\ \hline \square \end{array}$$

7. [Powers of 10 ×,÷]

$8000 \div 100 =$ ☐

8. [Large Number ×,÷]

☐

$9\overline{)9342}$

9. [Decimals]

$$\begin{array}{r} 4.52 \\ \times\ \ 2 \\ \hline \square \end{array}$$

10. [Fractions]

$3\frac{1}{6} + 2\frac{4}{6} =$ ☐

11. [Decimals / Fractions / Percentages]

If an $80 jumper is reduced by 20%, what is the discount? $ ☐

12. [Place Value] *

Estimate the total cost by rounding to the nearest dollar:

$12.15 + $4.05 + $7.75 + $6.55

$ ☐

13. [Operations] *

$9 - (3 + 1) \times 2 =$ ☐

14. [Exploring Numbers]

Mark the following points on the number line:

A at +2 and B at 0.

15. [Number Patterns / Equations]

$\frac{1}{4}$ of ☐ $= 9$

16. [Units of Measurement] *

How many metres in height is the Statue of Liberty (New York) if it is 30 times the height of a 154 cm person?

m

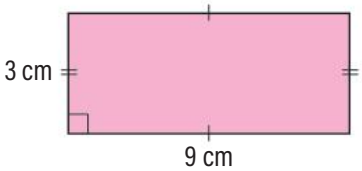
17. [Measuring] *

The starting time of the Sydney to Hobart Yacht race is 1:10 pm. Eighty minutes before this, other boats are excluded from the area. At what time must the other boats be gone? Answer using the 12-hour time format.

:

18. [Perimeter / Area]

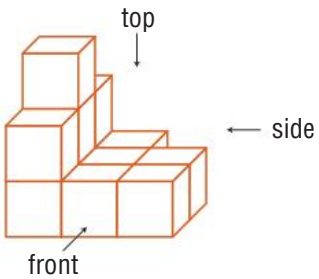
Find the area of this rectangle.



cm^2

19. [Shapes]

Draw the side and front views of this 3-dimensional shape.

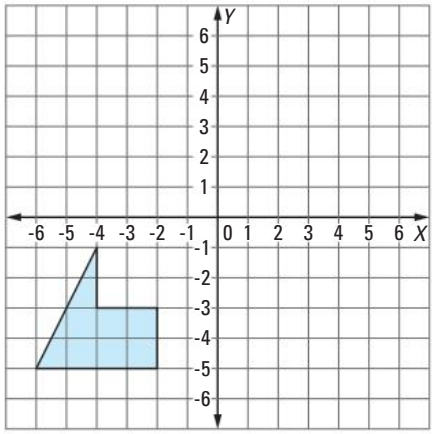


side view

front view

20. [Location / Transformation]

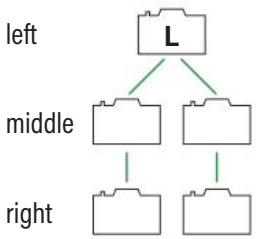
Redraw this shape after reflecting it in the *X*-axis and then in the *Y*-axis.



21. [Statistics / Probability]

In how many ways can Lisa, Amy and San be arranged for a group photo?

[Complete the tree diagram to help you solve the problem.]



22. [Problem Solving 1] *

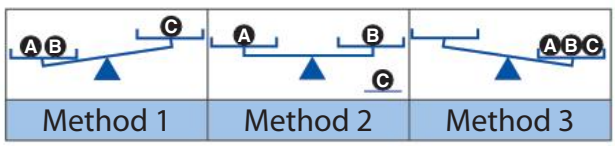
Which deal costs less per litre?

A $32 for 4 L

B $8.50 for 1 L

23. [Problem Solving 2] *

Three spheres are similar in appearance but only two are identical in weight. Which sphere is different in weight? Which method indicates this?



sphere = method =

24. [Problem Solving 3]

Fill in the missing digits in the multiplication.

$$\begin{array}{r} 1\square 4 \\ \times \quad 8 \\ \hline \square 9\square \end{array}$$

MATHS MATE

Term 4 - Sheet 8

Name: .....

Due Date: ...../...../.....

Parent's Signature: .....

1. [+ Whole Numbers to 10]

	38	5	13	30	7	21	36	4	29	32
+ 8										

2. [– Whole Numbers to 10]

	6	13	34	12	40	8	7	11	15	29
– 4										

3. [× Whole Numbers to 10]

	7	2	8	9	6	10	4	1	3	5
× 9										

4. [÷ Whole Numbers to 10]

	25	10	5	50	15	35	30	20	45	40
÷ 5										

SPECIAL NUMBERS

Adding 1 to the product of 4 consecutive numbers always gives a square number.

(e.g. $3 \times 4 \times 5 \times 6 + 1 = 19^2$)

ALSO:

Adding 1 to the product of the first and last numbers $(3 \times 6) + 1$ always gives the number that is being squared. In this example it is 19.

5. [Large Number +]

$$\begin{array}{r} 6\,5\,1\,8 \\ 1\,4\,4 \\ +\,2\,9\,7\,0 \\ \hline \end{array}$$

6. [Large Number –]

$$\begin{array}{r} 4\,3\,8\,2 \\ -\,3\,7\,6\,9 \\ \hline \end{array}$$

7. [Powers of 10 ×,÷]

$50\,000 \div 100 =$

8. [Large Number ×,÷]

$6\overline{)7\,3\,5\,0}$

9. [Decimals]

$$\begin{array}{r} 1\,6.2 \\ \times \quad 4 \\ \hline \end{array}$$

10. [Fractions]

$4\frac{2}{3} - 1\frac{1}{3} =$

11. [Decimals / Fractions / Percentages]

If a $300 dress is reduced by 40%, what is the discount? $

12. [Place Value] *

Effie swam 2.2 km, rode her bike 13.6 km and ran 4.1 km. Estimate the total distance travelled by rounding to the nearest kilometre.

km

13. [Operations] *

$12 \div (6 - 4) - 1 =$

14. [Exploring Numbers]

Mark the following points on the number line:

A at –4 and B at +4.

–6 –5 –4 –3 –2 –1 0 1 2 3 4 5 6

15. [Number Patterns / Equations]

$\frac{1}{3}$ of ☐ = 20

16. [Units of Measurement] *

A typical person has 100 000 strands of hair on their head. Suppose each strand is 50 cm long. How many kilometres of scalpal hair would the typical person have?

km

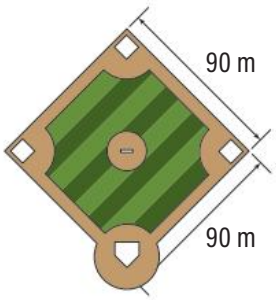
17. [Measuring] *

The exam started at 11:20 am. After 1 hour and 20 minutes Billy finished and left the room. He left 15 minutes before me. At what time did I leave the exam room? Answer using the 12-hour time format.

:

18. [Perimeter / Area]

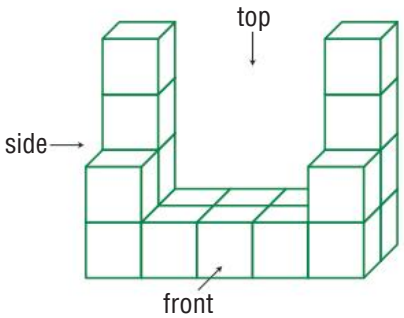
Find the area of this square baseball infield.



m^2

19. [Shapes]

Draw the front and top views of this 3-dimensional shape.

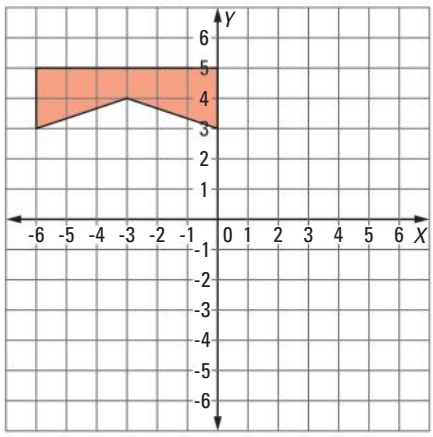


front view

top view

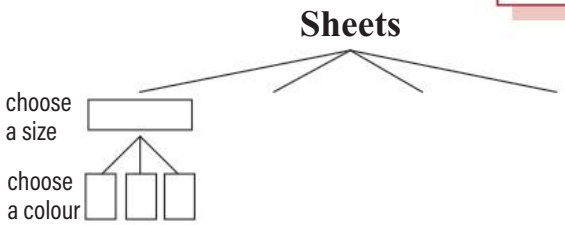
20. [Location / Transformation]

Redraw this shape after translating it 5 units down, and then rotating it 180° around the origin of the Cartesian plane.



21. [Statistics / Probability]

A store is selling 4 sizes of sheets (single, double, queen and king). Each style comes in 3 colours (yellow, blue, white). How many combinations of sheets are available? [Complete the tree diagram to help you solve the problem.]



22. [Problem Solving 1] *

Which deal costs less per millilitre?

A 75¢ for 500 mL

B $2 for 2 L

23. [Problem Solving 2] *

A square has a perimeter of 60 cm. A rectangle has the shape of two of these squares placed side by side. What is the perimeter of the rectangle?

cm

24. [Problem Solving 3]

Fill in the missing digits in the multiplication.

$$\begin{array}{r} 2\ 7 \\ \times\ \square\ 5 \\ \hline \square\ \square\ \square \\ \square\ \square\ 0 \\ \hline 9\ \square\ \square \end{array}$$