MENTAL MATHS

ADDITION & SUBTRACTION

15 + 9 = **24**	14 − 7 = **7**	18 − **6** = 12
18 + 8 = **26**	16 − 9 = **7**	15 − **7** = 8
13 + 14 = **27**	12 − 8 = **4**	**21** − 4 = 17
15 + 14 = **29**	11 − 3 = **8**	**24** − 15 = 9
8 + 22 = **30**	13 − 8 = **5**	30 − **14** = 16

MULTIPLICATION & DIVISION

9 × 6 = **54**	9 × **100** = 900	30 ÷ 10 = **3**
9 × 3 = **27**	**30** × 9 = 270	50 ÷ 10 = **5**
9 × 7 = **63**	9 × **20** = 180	10 ÷ 10 = **1**
9 × 10 = **90**	9 × **12** = 108	90 ÷ 10 = **9**
9 × 2 = **18**	**11** × 9 = 99	100 ÷ 10 = **10**

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Break each number into parts that are easy to divide. Then write the answer.

230 ÷ 5 = **46** → **200** + **30**

370 ÷ 5 = **74** → **350** + **20**

432 ÷ 6 = **72** → **420** + **12**

564 ÷ 6 = **94** → **540** + **24**

231 ÷ 7 = **33** → **210** + **21**

595 ÷ 7 = **85** → **560** + **35**

3870 ÷ 9 = **430** → **3600** + **270**

7830 ÷ 9 = **870** → **7200** + **630**

$21.60 ÷ 4 = **$5.40** → **$20** + **$1.60**

$33.60 ÷ 6 = **$5.60** → **$30** + **$3.60**

$66.40 ÷ 8 = **$8.30** → **$64** + **$2.40**

$55.30 ÷ 7 = **$7.90** → **$49** + **$6.30**

2 Complete the diagrams to show how you can use factors to solve these.

420 ÷ 12 → **70** **35** / ÷ 6   ÷ 2

400 ÷ 16 → **50** **25** / ÷ 8   ÷ 2

390 ÷ 15 → **130** **26** / ÷ 3   ÷ 5

480 ÷ 24 → **40** **20** / ÷ 12   ÷ 2
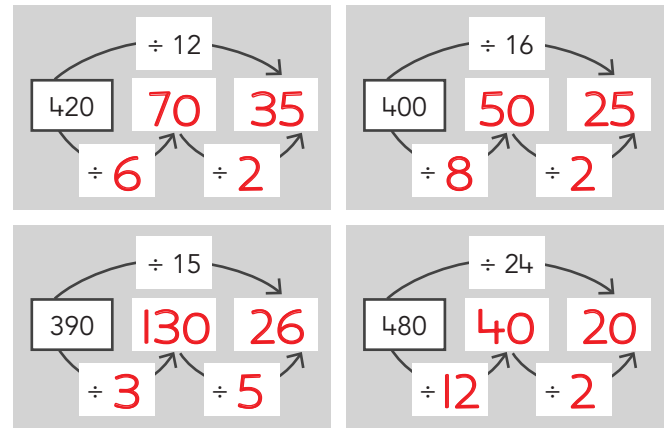
FRACTIONS & DECIMALS

3 Use a written method to calculate these.

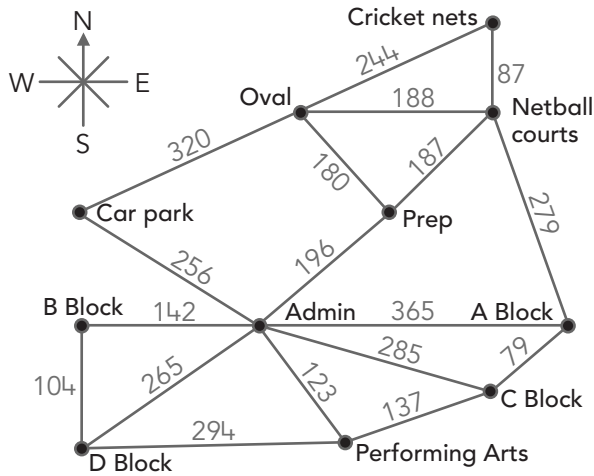|	
36.2 − 8.7 = **27.5**	45.68 − 8.43 = **37.25**
72.09 − 14.23 = **57.86**	26.9 − 7.18 = **19.72**

ℹ You can **use factors** to make division of large numbers easier.
For example, when you *see* 660 ÷ 15 *think* 3 × 5 = 15 so 660 ÷ 3 = 220 then 220 ÷ 5 = 44.

USING UNITS OF MEASUREMENT

4 The distances around this school are shown in **metres**.

Write the distance for each trip in 2 ways.

D Block ⟶ Performing Arts ⟶ C Block

294
137

= 431 m
= 0.431 km

Admin ⟶ Prep ⟶ Oval

196
180

= 376 m
= 0.376 km

Car park ⟶ Admin ⟶ A Block ⟶ Netball courts ⟶ Prep

256   279
365   187

= 1087 m
= 1.087 km

B Block ⟶ D Block ⟶ Admin ⟶ C Block

104
265
285

= 654 m
= 0.654 km

Prep ⟶ Oval ⟶ Netball courts ⟶ Prep

180
188
187

= 555 m
= 0.555 km

GEOMETRIC REASONING

5 Label these angles as **acute**, **obtuse** and **reflex**.

acute   reflex   obtuse

CHANCE

6 Marbles are randomly drawn from this bag.
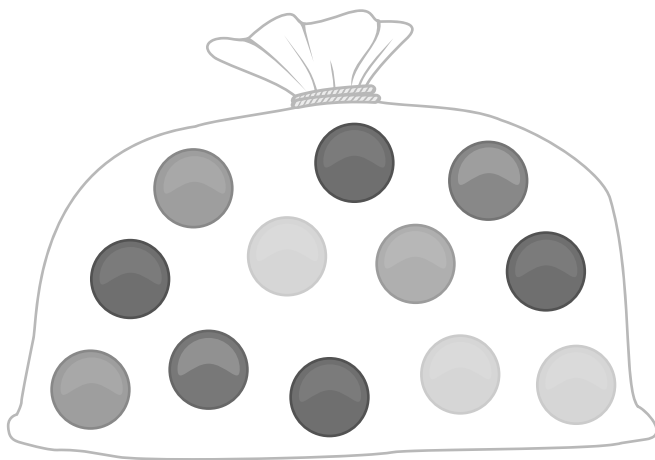
a. Write a fraction to describe the chance of taking these marbles out of the bag.

purple	$\frac{1}{12}$	yellow	$\frac{3}{12}$
green	$\frac{2}{12}$	green **or** orange	$\frac{3}{12}$
blue	$\frac{4}{12}$	red **or** blue	$\frac{5}{12}$

b. Which colour is most likely?   blue

Which 2 operations will complete a true number sentence?

8 **X** (12 **÷** 2) = 48

Write your answers in the boxes.

PARENT/CARER SIGNATURE _____

MENTAL MATHS

ADDITION & SUBTRACTION

11 + 9 = **20**	14 − 4 = **10**	17 − **13** = 4
8 + 16 = **24**	15 − 13 = **2**	**19** − 6 = 13
15 + 15 = **30**	11 − 3 = **8**	20 − **8** = 12
12 + 14 = **26**	12 − 8 = **4**	**24** − 7 = 17
13 + 13 = **26**	16 − 8 = **8**	21 − **6** = 15

MULTIPLICATION & DIVISION

8 × 10 = **80**	**20** × 10 = 200	**30** ÷ 2 = 15
3 × 10 = **30**	10 × **12** = 120	**48** ÷ 2 = 24
1 × 10 = **10**	**50** × 10 = 500	**32** ÷ 2 = 16
5 × 10 = **50**	10 × **25** = 250	**200** ÷ 2 = 100
2 × 10 = **20**	**11** × 10 = 110	**40** ÷ 2 = 20

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Break each number into parts to divide these.

680 ÷ 4 = **170**
400 + **280**

485 ÷ 5 = **97**
450 + **35**

$59.20 ÷ 8 = $**7.40**
$**56** + $**3.20**

$26.40 ÷ 4 = $**6.60**
$**24** + $**2.40**

2 Use factors to help you divide these.

÷ 18
936 | **104** | **52**
÷ 9   ÷ 2

÷ 40
1280 | **320** | **32**
÷ 4   ÷ 10

÷ 90
3690 | **369** | **41**
÷ 10   ÷ 9

÷ 24
864 | **108** | **36**
÷ 8   ÷ 3

MONEY & FINANCIAL MATHEMATICS

3 Use these items to answer the questions.

PARTY FOODS

$2.95 $3.85 $4.60
95c $1.89 $7.59

a. Write the total cost.

marshmallows and jelly beans

$1.89 + $4.60

Cost = $ **6.49**

chocolate and ice cream

$2.95 + $7.59

Cost = $ **10.54**

licorice, potato chips and chocolate

95c + $3.85 + $2.95

Cost = $ **7.75**

b. Write the difference between these prices.

licorice and jelly beans

$4.60 − 95c

Difference = $ **3.65**

potato chips and marshmallows

$3.85 − $1.89

Difference = $ **1.96**

ℹ️ You can **divide the parts** to make division of large numbers easier.
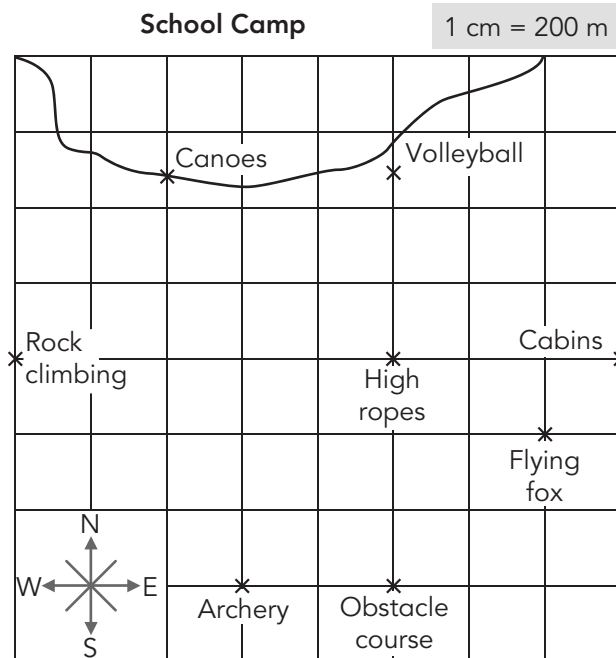For example, when you *see* 1456 ÷ 7 *think* 1400 ÷ 7 plus 56 ÷ 7 = 200 + 8 = 208.

USING UNITS OF MEASUREMENT

4 Work out these total masses. Remember to convert to the same mass unit first.

1.355 kg	0.45 kg	250 g	330 g
0.2 kg	760 g	450 g	1.25 kg

apples and berries	nuts and kiwifruit
Total **1.685** kg	Total **0.45** kg
melon, celery and grapes	**bananas, melon and berries**
Total **2.46** kg	Total **2.03** kg

5 Write the direction and distance.

School Camp

1 cm = 200 m

Canoes · Volleyball · Rock climbing · High ropes · Cabins · Flying fox · Archery · Obstacle course

N W E S

a. Archery ⟶ Obstacle course   **E 400** m

b. Flying fox ⟶ Cabins   **NE 225** m

c. High ropes ⟶ Rock climbing   **W 1000** m

d. Volleyball ⟶ High ropes   **S 500** m

CHANCE

6 These 3 animal cards have been cut into Head, Body and Feet cards.
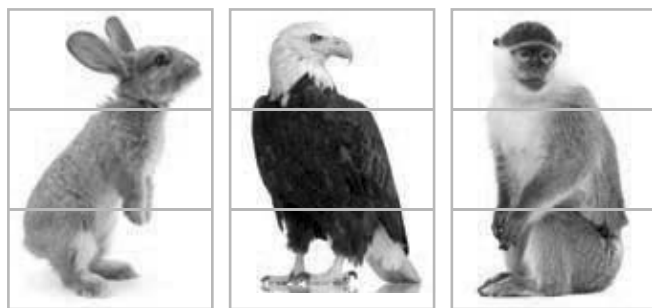
Imagine you combine different head, body and feet cards to create crazy animals.

a. How many different animals can you make?   **27**

b. What fraction of these will be correct animals? $\dfrac{1}{9}$

c. If you choose an eagle's head, how many different animals can you make?   **9**

d. If you choose a rabbit's body, how many different animals can you make?   **9**

One hundred students were asked to vote for their favourite sport. This pie chart shows the results.

What percentage describes the number who voted for netball?

10%	25%	18%	50%
◯	●	◯	◯

Colour one bubble.

netball · swimming · cricket · soccer
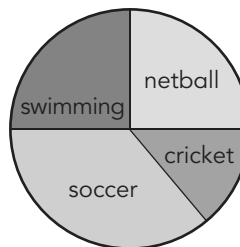
PARENT/CARER SIGNATURE _____

MENTAL MATHS

ADDITION & SUBTRACTION

11 + 14 = **25**	12 − 9 = **3**	16 − **12** = 4
16 + 12 = **28**	13 − 6 = **7**	**21** − 8 = 13
13 + 9 = **22**	11 − 6 = **5**	32 − **20** = 12
14 + 15 = **29**	14 − 6 = **8**	**35** − 7 = 28
20 + 13 = **33**	15 − 6 = **9**	45 − **30** = 15

MULTIPLICATION & DIVISION

6 × 10 = **60**	**72** × 10 = 720	**96** ÷ 2 = 48
10 × 10 = **100**	5 × **24** = 120	**72** ÷ 2 = 36
10 × 7 = **70**	**60** × 10 = 600	**28** ÷ 2 = 14
4 × 10 = **40**	5 × **50** = 250	**180** ÷ 2 = 90
10 × 0 = **0**	**22** × 5 = 110	**52** ÷ 2 = 26

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write the missing integers.

−4 **−3** –2 **−1** 0 1 **2** **3** **4** 5

2 Write **>** or **<** to show true comparisons.

3 **<** 5   3 **>** −5   −3 **<** 5

−3 **>** −5   0 **>** −4   2 **>** −3

3 List all the integers between these numbers.

4 and −3	**3, 2, 1, 0, −1, −2**
−2 and 5	**−1, 0, 1, 2, 3, 4**

4 Write each row in order from least to greatest.

−1, 5, 2, −4, 0, 3	**−4, −1, 0, 2, 3, 5**
3, 0, −2, 1, −4, −5	**−5, −4, −2, 0, 1, 3**

5 Complete the number sentences.

	Th	H	T	Ones	t	h	th
6 × 1000 =	6	**0**	**0**	**0** .			
6 × 100 =		**6**	**0**	**0** .			
6 × 10 =			**6**	**0** .			
6 × 1 =				**6** .			
6 × 0.1 =				.	**6**		
6 × 0.01 =				.	**0**	**6**	
6 × 0.001 =				.	**0**	**0**	**6**

6 Write the temperature shown then the new temperature.

Temperature **−8** °C
Rises 15°C
New Temperature **7** °C

Temperature **8** °C
Falls 20°C
New Temperature **−12** °C

Temperature **−8** °C
Falls 9°C
New Temperature **−17** °C

Temperature **8** °C
Rises 20°C
New Temperature **28** °C
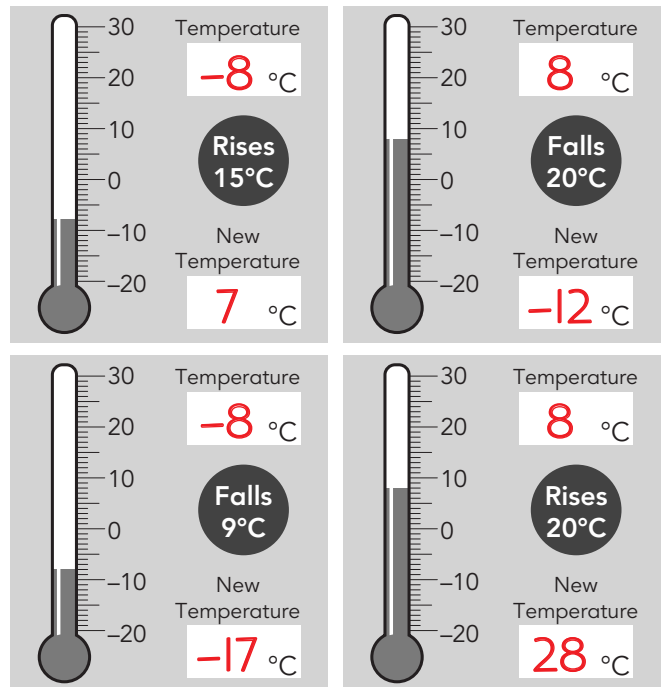
FRACTIONS & DECIMALS

7 Complete these.

× 10 → 0.80 → 8
← ÷ **10**

× 1000 → 0.6 → **600**
← ÷**1000**

× **1000** → 0.03 → 30
← ÷ **1000**

× **100** → **0.5** → 50
← ÷ 100

ℹ **Integers** are the counting numbers (1, 2, 3, 4...), zero and the negatives of the counting numbers (−1, −2, −3, −4...).

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

8 Write each list in order from least to greatest.
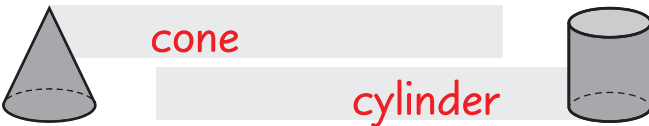
1.06 kg	0.75 kg
800 g	800 g
1.515 kg	1.06 kg
1.2 kg	1.2 kg
0.75 kg	1.515 kg

250 g	250 g
2.05 kg	0.52 kg
1.09 kg	1.09 kg
1100 g	1100 g
0.52 kg	2.05 kg

9 Convert these lengths.

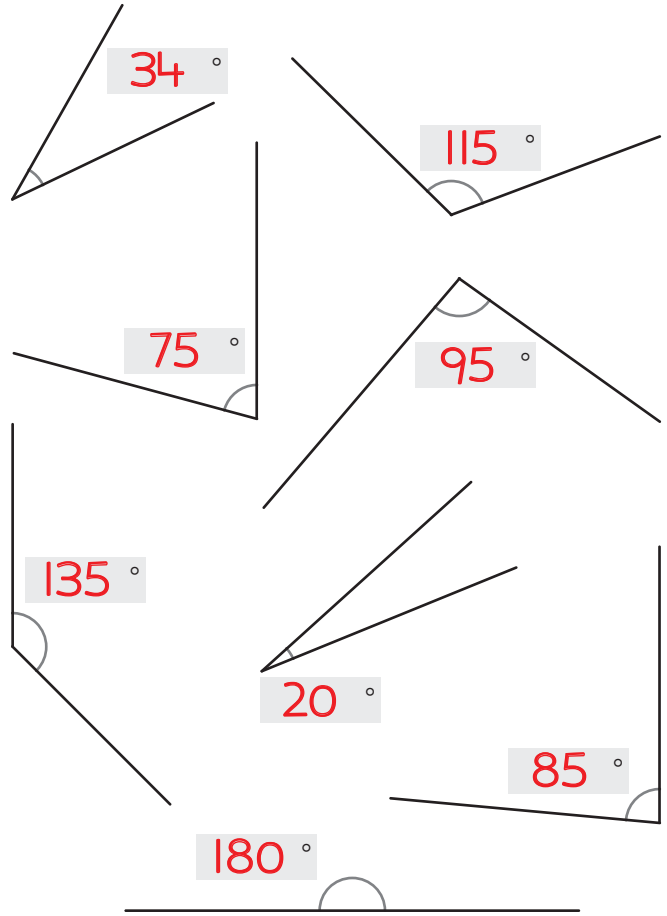| 0.682 m	682 cm	0.95 km	950 m
0.91 m	910 cm	$\frac{3}{4}$ km	750 m
0.5 m	5000 mm	$\frac{2}{5}$ km	400 m
1.76 m	1760 mm	900 m	0.9 km

SHAPE

10 Write the full name of each object.

cone

cylinder

GEOMETRIC REASONING

11 Use a protractor to measure these angles.

34 °

115 °

75 °

95 °

135 °
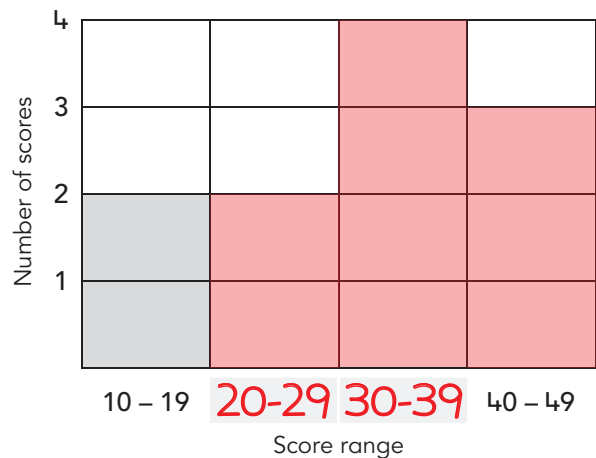
20 °

85 °

180 °

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

12 Use the following test scores to complete the table and bar graph.

40, 13, 21, 14, 26, 41, 33, 35, 36, 37, 40
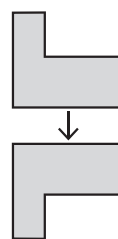
Score Range	Frequency
10 — 19	2
20 — 29	2
30 — 39	4
40 — 49	3

Title: Test Scores

(Bar graph: Number of scores vs Score range: 10–19, 20-29, 30-39, 40–49)

TESTER

Which transformation does this picture show?

- slide vertically
- turn 180°
- flip horizontally
- flip vertically ●

Colour one bubble.

PARENT/CARER SIGNATURE _____

MENTAL MATHS

ADDITION & SUBTRACTION

14 + 17 = **31**	22 − **13** = 9	21 − 13 = **8**
15 + 16 = **31**	**35** − 15 = 20	27 − 11 = **16**
13 + 13 = **26**	40 − **12** = 28	24 − 16 = **8**
22 + 14 = **36**	**31** − 12 = 19	31 − 12 = **19**
16 + 16 = **32**	50 − **33** = 17	50 − 15 = **35**

MULTIPLICATION & DIVISION

3 × 60 = **180**	**12** × 3 = 36	404 ÷ 4 = **101**
3 × 19 = **57**	**25** × 3 = 75	**84** ÷ 4 = 21
3 × 31 = **93**	**20** × 3 = 60	64 ÷ 4 = **16**
3 × 42 = **126**	**15** × 3 = 45	**128** ÷ 4 = 32
3 × 33 = **99**	**30** × 3 = 90	96 ÷ 4 = **24**

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

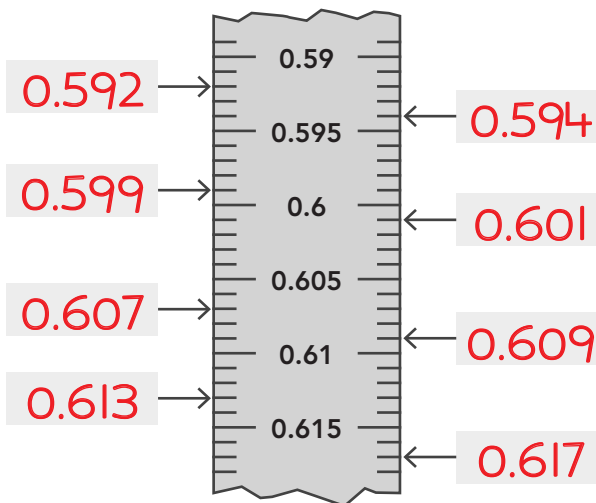**1** Complete the missing information for Mt Everest.

	Jan	Feb	Mar	April	May	June
Base Temp.	−17°C	−17°C	**−13°C**	−10°C	−7°C	−4°C
Temp. Change	Falls ↓19°C	Falls ↓18°C	Falls ↓19°C	**Falls ↓20°C**	Falls ↓18°C	**Falls ↓15°C**
Summit Temp.	**−36°C**	**−35°C**	−32°C	−30°C	**−25°C**	−19°C

	July	Aug	Sept	Oct	Nov	Dec
Base Temp.	−3°C	**−4°C**	−6°C	−9°C	**−11°C**	−15°C
Temp. Change	Falls ↓15°C	Falls ↓14°C	**Falls ↓15°C**	Falls ↓18°C	Falls ↓19°C	**Falls ↓19°C**
Summit Temp.	**−18°C**	−18°C	−21°C	**−27°C**	−30°C	−34°C

FRACTIONS & DECIMALS

2 Write the decimal in each box.

0.592 →
0.599 →
0.607 →
0.613 →

0.59
0.595 ← **0.594**
0.6
0.605 ← **0.601**
0.61 ← **0.609**
0.615 ← **0.617**

3 Complete these.

× **1000**
0.08 → 80
÷ **1000**

× 100
6.9 → **690**
÷ **100**
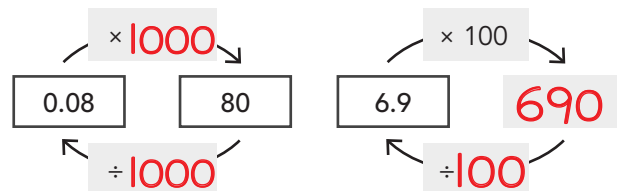
4 Connect each number to the number line. Then round to the nearest **whole** number.

0   1   2   3

1.72	0.39	2.06	2.7	1.1
2	**0**	**2**	**3**	**1**
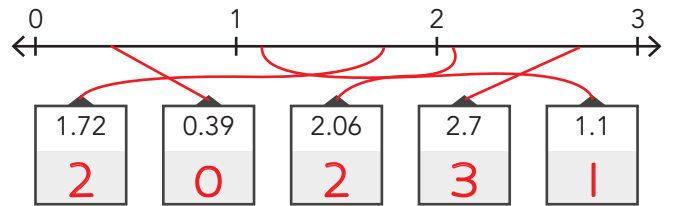
5 Connect each number to the number line. Then round to the nearest **tenth**.

5   6   7   8

5.76	7.183	6.09	5.564	7.94
5.8	**7.2**	**6.1**	**5.6**	**7.9**
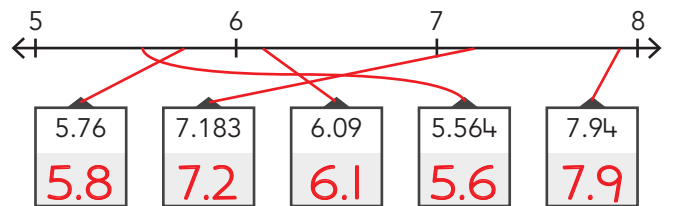
6 Use all these digits. Make these numbers.

| 4 | 8 | 1 | 7 | 5 | 9 | 3 |

- greatest number possible   **9 8 7 5 . 4 3 1**
- least number possible   **1 3 4 5 . 7 8 9**
- closest number to 5000   **4 9 8 7 . 5 3 1**
- closest number to 5500   **5 4 9 8 . 7 3 1**
- closest number to 9200   **9 1 8 7 . 5 4 3**

ℹ A polygon is **equilateral** if all the sides are the same length.
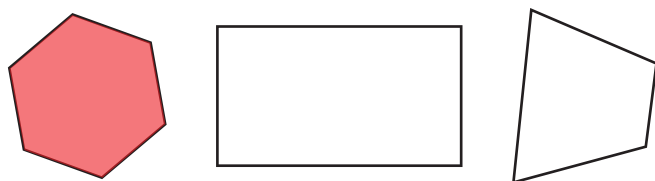A polygon is **equiangular** if all the angles are the same size.

USING UNITS OF MEASUREMENT
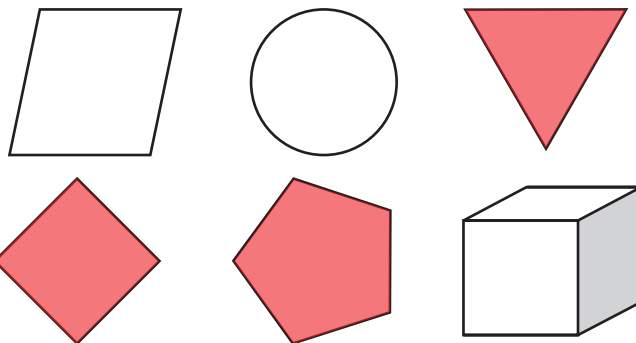
7 Convert these masses.

1 kg	**1000** g	1 tonne	**1000** kg
1 tonne	**1 000 000** g	0.75 tonne	**750** kg
8 g	**0.008** kg	600 g	**0.6** kg
0.745 kg	**745** g	1.3 kg	**1300** g
$\frac{1}{4}$ kg	**250** g	$2\frac{1}{2}$ kg	**2500** g

SHAPE

8 A polygon that is equilateral and equiangular is called a regular polygon. Colour all the regular polygons green.

(Note: There are more shapes above right.)

GEOMETRIC REASONING

9 Use a protractor to draw these angles.

Angle = 55° Arm length = 2.5 cm	Angle = 130° Arm length = 3 cm

CHANCE

10 Imagine these cards are shuffled and placed facedown then a card is randomly selected.

S	H	O	E	S
S	O	C	K	S

a. Which letters have a $\frac{1}{10}$ chance of being selected?

H, E, C, K

b. Write a fraction to describe the chance of selecting these.

an S card	$\frac{4}{10}$	an O card	$\frac{2}{10}$
an S or an E card	$\frac{5}{10}$	an O or a K card	$\frac{3}{10}$
a card that shows a letter in the 1st half of the alphabet	$\frac{4}{10}$	a card that shows a letter in the 2nd half of the alphabet	$\frac{6}{10}$

TESTER

Imagine these 2 blocks are joined without breaking them apart.

Colour one bubble.

Which of these objects can be made from these 2 blocks?

○   ○   ● (red)   ○

PARENT/CARER SIGNATURE _____

MENTAL MATHS
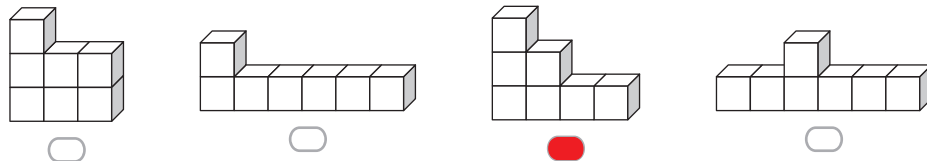
ADDITION & SUBTRACTION

13 + 17 = **30**	14 − **8** = 6	23 − 6 = **17**
16 + 12 = **28**	16 − **8** = 8	28 − 19 = **9**
8 + 19 = **27**	12 − **5** = 7	25 − 11 = **14**
7 + 16 = **23**	17 − **9** = 8	30 − 8 = **22**
3 + 18 = **21**	15 − **8** = 7	22 − 15 = **7**

MULTIPLICATION & DIVISION

4 × 13 = **52**	4 × **25** = 100	**65** ÷ 5 = 13
4 × 27 = **108**	**12** × 4 = 48	115 ÷ 5 = **23**
4 × 90 = **360**	4 × **20** = 80	**110** ÷ 5 = 22
4 × 51 = **204**	**15** × 4 = 60	550 ÷ 5 = **110**
4 × 14 = **56**	4 × **50** = 200	**200** ÷ 5 = 40

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 **a.** What is the cost of 2 umbrellas?

• $36

2 × $36 = $ **72**

b. What is the cost of 20 umbrellas?

2 × $36 × 10 = $ **720**

c. What is the cost of 24 umbrellas?

20 × $36 + 4 × $36 = $ **864**

d. Write the costs of these.

3 umbrellas	**3** × $**36** = $ **108**	
30 umbrellas	**3** × $**36** × **10** = $**1080**	
35 umbrellas	**30** × $**36** + **5** × $**36** = $**1260**	

4 umbrellas	**4** × $**36** = $ **144**	
40 umbrellas	**4** × $**36** × **10** = $**1440**	
46 umbrellas	**40** × $**36** + **6** × $**36** = $**1656**	

2 Check these calculations.
If incorrect, show the correct calculation.

```
      4 5
  ×     3 6
      2 7 0
    1 3 5 0
    1 6 2 0
        ✔
```

```
      3 7          37
  ×     5 9      x 59
      3 3 3       333
      1 8 5      1850
      5 1 8      2183
```

FRACTIONS & DECIMALS

3 Use a written method to solve these.

2.7 × 1.9 = **5.13**	6.1 × 3.8 = **23.18**
4.6 × 7.2 = **33.12**	5.7 × 4.5 = **25.65**

PATTERNS & ALGEBRA

4 Complete these multiplication patterns.

28 × 2 = **56**	39 × 3 = **117**
28 × 0.2 = **5.6**	39 × 0.3 = **11.7**
2.8 × 0.2 = **0.56**	3.9 × 0.3 = **1.7**
16 × 6 = **96**	15 × 7 = **105**
16 × 0.6 = **9.6**	15 × 0.7 = **10.5**
1.6 × 0.6 = **0.96**	1.5 × 0.7 = **1.05**

i You multiply the length by the width to find the **area** of an oblong.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

5 Estimate the area. Then calculate the exact area.

7.6 m
4 m
Estimate = **30** m²
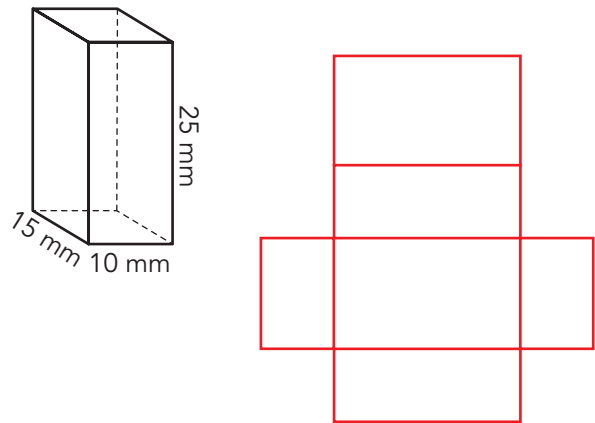Exact area = **30.4** m²

6.3 m
1.8 m
Estimate = **12** m²
Exact area = **11.34** m²

2.8 m
6.9 m
Estimate = **21** m²
Exact area = **19.32** m²

6 Write the missing dimensions for these oblongs.

Length = 14 m Width = 9 m Area = **126** m²	Length = 18 m Width = **11** m Area = 198 m²
Length = **16** m Width = 13 m Area = 208 m²	Length = 2.8 m Width = 1.2 m Area = **3.36** m²

SHAPE

7 Draw a net using the dimensions shown.

25 mm
15 mm   10 mm

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

8 One hundred students were surveyed about their favourite recreational activity.

a. Complete the pie chart using this data.

Recreation Activity				
Reading	Watching TV	Sport	Music	Games
5	25	40	15	15

b. What percentage prefer music or reading? **20**

c. What percentage **do not** prefer sport? **60**

Title: **Our Favourite Recreational Activity**

■ **Sport**
■ **Watching TV**
■ **Music**
■ **Games**
■ **Reading**

TESTER

How much change would you receive if you bought 3 t-shirts and paid with a $100 note?

$54.50 $44.50 $55.50 $81.50
○   ● (filled)   ○   ○

$18.50

Colour one bubble.

PARENT/CARER SIGNATURE _____

MENTAL MATHS

ADDITION & SUBTRACTION

17 + 17 = **34**   18 – **6** = 12   20 – 17 = **3**

19 + 21 = **40**   15 – **6** = 9   26 – 18 = **8**

15 + 18 = **33**   **19** – 14 = 5   27 – 13 = **14**

18 + 18 = **36**   **25** – 16 = 9   30 – 11 = **19**

25 + 16 = **41**   23 – **9** = 14   40 – 13 = **27**

MULTIPLICATION & DIVISION

5 × 21 = **105**   13 × 8 = **104**   **60** ÷ 5 = 12

33 × 5 = **165**   21 × 8 = **168**   **100** ÷ 5 = 20

5 × 16 = **90**   15 × 8 = **120**   **55** ÷ 5 = 11

49 × 5 = **245**   33 × 8 = **264**   **75** ÷ 5 = 15

5 × 12 = **60**   46 × 8 = **368**   **125** ÷ 5 = 25

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Use a written method to solve these.

47 × 53 = **2491**

3.9 × 18 = **70.2**

5.3 × 6.2 = **32.86**

94 × 56 = **5264**

FRACTIONS & DECIMALS

2 Mark the estimate with a ✔ or ✗ to show if it makes sense. Use a written method to work out the exact answer.

3.2 × 4.5	6.3 × 14
Estimate ⟶ 150 ✔	Estimate ⟶ 8.82 ✗
14.4	**88.2**

3 **a.** Look at this caravan floor plan. Calculate these areas.
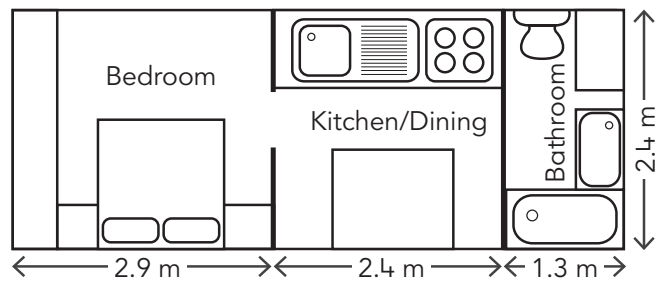
Bedroom

Kitchen/Dining

Bathroom

2.4 m

⟵ 2.9 m ⟶ ⟵ 2.4 m ⟶ ⟵ 1.3 m ⟶

Bedroom	Kitchen/Dining
2.9 x 2.4	2.4 x 2.4
6.96 m²	**5.76** m²
Bathroom	Full caravan
1.3 x 2.4	6.6 x 2.4
3.12 m²	**15.84** m²

b. A roll-out annex is the length of the bedroom and kitchen/dining rooms together and is 2.8 m wide. What is the area under the annex?
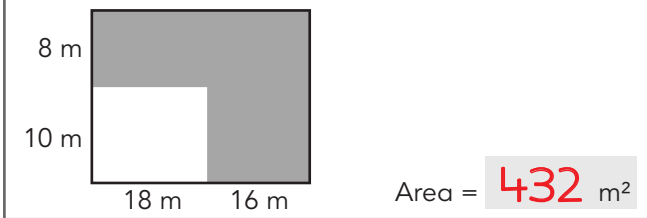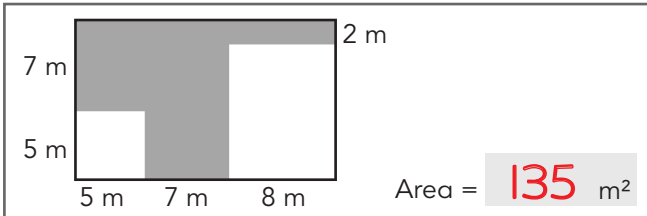
2.9 + 2.4 = 5.3

5.3 x 2.8

14.84 m²

ℹ You can use a **vertical written method** to multiply "messy" numbers but you must remember to line up the places of the numbers you are multiplying.
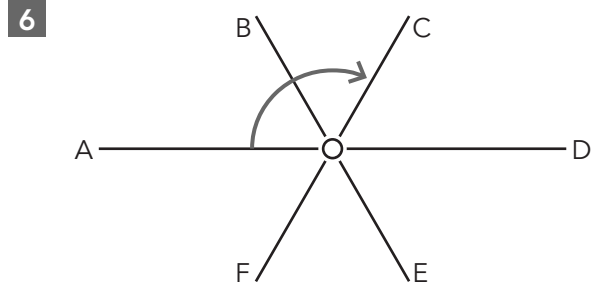
MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

4 Calculate the shaded area.

7 m
2 m
5 m
5 m   7 m   8 m

Area = **135** m²

8 m
10 m
18 m   16 m

Area = **432** m²

15 cm
7 cm
5 cm

Surface area = **430** cm²

5 Calculate the surface area of each prism.
Write number sentences to show your thinking.

9 cm
6 cm
4 cm

Surface area = **228** cm²

GEOMETRIC REASONING

6

B   C
A — O — D
F   E
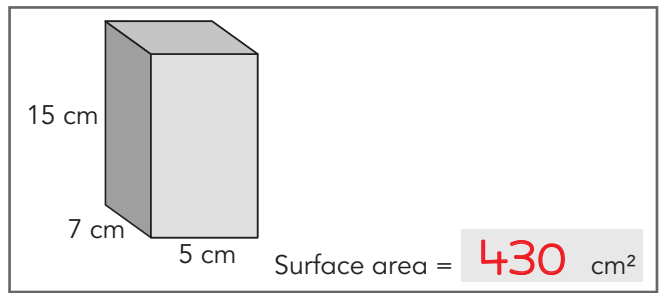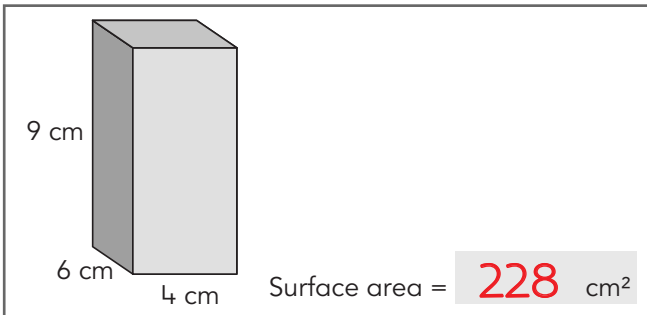
These lines split 360° into 6 equal parts.
Calculate each angle without a protractor.

Angle AOB =	**60°**	Angle AOC =	**120°**
Angle COF =	**180°**	Angle DOB =	**240°**
Angle EOD =	**300°**	Angle FOB =	**120°**

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

7 This tally chart shows the number of hoops scored by a group of basketball players at practice.

a. Write the totals in the table.

Number of hoops	Tally	Total
6	|||	3
7	ⵌ ⵌ	10
8	||||	4
9	ⵌ |	6
10		0
11	|	1

b. Complete this dot plot to show the data.

6   7   8   9   10   11
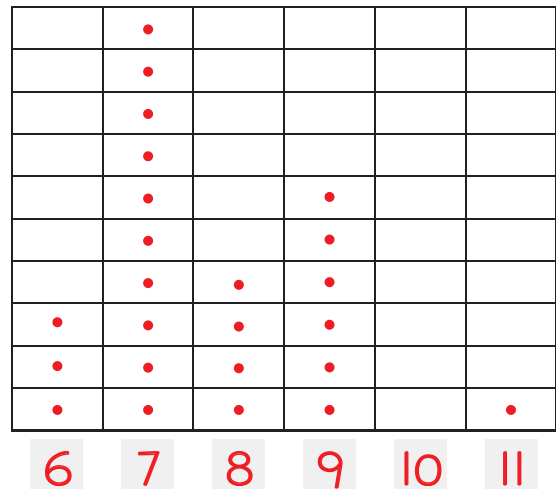
Title: **Hoops scored at practice**

TESTER

What percentage of this grid is shaded?

85%   25%   15%   5%
○   ○   ●   ○

PARENT/CARER SIGNATURE _____

MENTAL MATHS
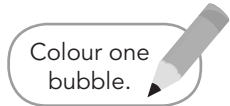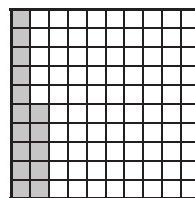
ADDITION & SUBTRACTION

8 + 17 = **25**	12 – **9** = 3	30 – 13 = **17**
16 + 11 = **27**	**18** – 7 = 11	25 – 16 = **9**
16 + 19 = **35**	20 – **15** = 5	40 – 15 = **25**
18 + 5 = **23**	**23** – 5 = 18	27 – 9 = **18**
5 + 14 = **19**	21 – **14** = 7	50 – 35 = **15**

MULTIPLICATION & DIVISION

10 × 0.4 = **4**	9 × 8 = **72**	**900** ÷ 9 = 100
10 × 0.01 = **0.1**	9 × 10 = **90**	**450** ÷ 9 = 50
10 × 0.16 = **1.6**	9 × 3 = **27**	**99** ÷ 9 = 11
10 × 0.91 = **9.1**	9 × 7 = **63**	**180** ÷ 9 = 20
10 × 0.72 = **7.2**	9 × 4 = **36**	**108** ÷ 9 = 12

NUMBER & ALGEBRA

FRACTIONS & DECIMALS

1 Complete the table.

Common Fraction	Hundredths	Decimal	%
$\frac{1}{4}$	$\frac{25}{100}$	0.25	**25** %
$\frac{1}{5}$	$\frac{20}{100}$	0.20	**20** %
$\frac{3}{4}$	$\frac{75}{100}$	0.75	**75** %
$\frac{2}{5}$	$\frac{40}{100}$	0.40	40 %
$\frac{4}{5}$	$\frac{80}{100}$	0.80	**80** %
$\frac{3}{5}$	$\frac{60}{100}$	0.60	**60** %
$\frac{1}{2}$	$\frac{50}{100}$	0.50	**50** %
$\frac{4}{4}$	$\frac{100}{100}$	**1.0**	**100** %

2 One hundred boys and one hundred girls were surveyed about their favourite subject.

Boys	
Maths	35
English	15%
Art	$\frac{15}{100}$
Science	25%
Music	0.1

Girls	
Maths	30
English	0.3
Art	$\frac{20}{100}$
Science	0.**15**
Music	5%

a. Write the missing score in each table.

b. What percentage of boys favoured Music? **10** %

c. What percentage of girls favoured English? **30** %

d. Write the percentage of boys who favoured Science as a common and decimal fraction. $\frac{25}{100}$ = **0.25**

e. What 2 subjects together were favoured by more than 50% of girls?

Maths and **English**

MONEY & FINANCIAL MATHEMATICS

3 Look at these camp prices.

Camp Costs			
Bus (each)	$25.00	High ropes	$9.25
Cabin (per night)	$19.99	Canoes	$4.95
Rock climbing	$8.90	Food (per day)	$17.85
Archery	$6.50	Flying fox	$2.35

Work out these costs.

a. The bus + 10 nights in a cabin + food for 10 days

1 student $**403.40**   20 students $**8068**

b. All 5 activities

1 student $**31.95**   20 students $**639**

ℹ You multiply the length by the width by the height to find the **volume** of a prism.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

4 Draw a line to the position on the number line.

0 m   1 m   2 m

| 1.7 m | 150 mm | 127 cm |
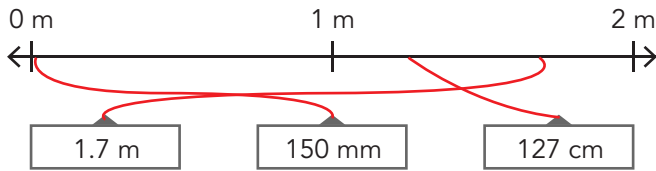
5 Use this prism to complete the table.
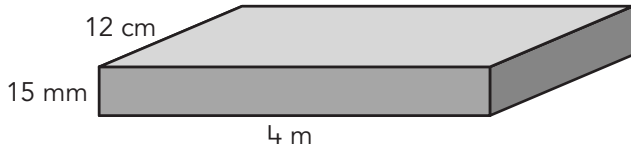
12 cm
15 mm
4 m

Length	Width	Height	Volume
4000 mm	120 mm	15 mm	7 200 000 mm²
400 cm	12 cm	1.5 cm	7200 cm²

6 Complete each table to show equivalent lengths.

2 km
2000 m
200 000 cm
2 000 000 mm

3.65 km
3650 m
365 000 cm
3 650 000 mm

0.95 km
950 m
95 000 cm
950 000 mm

4.8 km
4800 m
480 000 cm
4 800 000 mm

LOCATION & TRANSFORMATION

7 a. Draw the letter after each move.

	Flip right	Flip right	Slide down
START	F	Ⅎ (reversed F)	F
FINISH	Ⅎ	Ⅎ / Slide left	F / Flip left

	Slide left	Flip left
FINISH	Ⅎ	F

b. Write 2 instructions so that the letter returns to its starting position.

* Slide up
Flip right

GEOMETRIC REASONING

8 Use a protractor to measure and label the interior angles.

45° 238° 223° 67° 75° 72°

STATISTICS & PROBABILITY
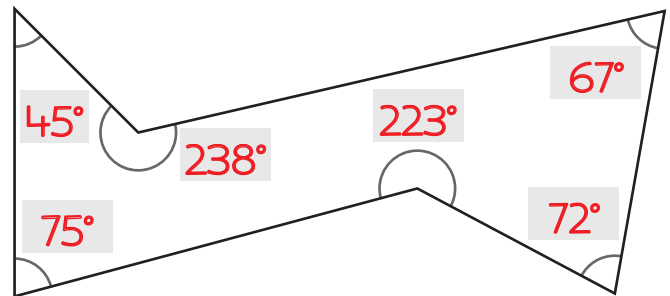
DATA REPRESENTATION & INTERPRETATION

9 This table shows the gain in length each week for a baby fish.

Week Birth	Length (mm)	Gain (mm)
Birth	7	—
1	11	4
2	17	6
3	25	8
4	30	5

a. Did the fish gain the same length each week? — No

b. What was the least recorded gain? — 4 mm

c. What was the greatest recorded gain? — 8 mm

d. What was the total gain over the 4 weeks? — 23 mm

* **e.** Estimate its length after Week 5. — 28 mm

TESTER

The swimming and cycling parts of a junior triathlon used $\frac{3}{4}$ of the total time allowed.

What fraction of the time is left for the run? — $\frac{1}{4}$

Write your answer in the box.

PARENT/CARER SIGNATURE

MENTAL MATHS

ADDITION & SUBTRACTION

16 + 17 = **33**	15 − **8** = 7	20 − 8 = **12**
8 + 18 = **26**	16 − **13** = 3	17 − 11 = **6**
25 + 8 = **33**	**20** − 16 = 4	23 − 7 = **16**
23 + 27 = **50**	21 − **8** = 13	25 − 16 = **9**
14 + 26 = **40**	**29** − 15 = 14	30 − 12 = **18**

MULTIPLICATION & DIVISION

6.1 × 10 = **61**	42 ÷ 2 = **21**	39 ÷ 3 = **13**
4.3 × 10 = **43**	26 ÷ 2 = **13**	69 ÷ 3 = **23**
0.7 × 10 = **7**	48 ÷ 2 = **24**	48 ÷ 3 = **16**
1.9 × 10 = **19**	64 ÷ 2 = **32**	21 ÷ 3 = **7**
0.06 × 10 = **0.6**	70 ÷ 2 = **35**	45 ÷ 3 = **15**

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Complete these.

```
    3 8
  ×  4 4
  ----
   152
  1520
  ----
  1672
```

```
    5 7
  ×  2 4
  ----
   228
  1140
  ----
  1368
```

```
    6 9
  ×  3 7
  ----
   483
  2070
  ----
  2553
```

FRACTIONS & DECIMALS

2 Write the equivalent amounts.

$\frac{3}{4}$ = $\frac{75}{100}$ = **75** % $\frac{3}{5}$ = $\frac{60}{100}$ = **60** %

$\frac{4}{10}$ = $\frac{40}{100}$ = **40** % $\frac{1}{5}$ = $\frac{20}{100}$ = **20** %

3 Work out the number of each car colour in these car parks. Then write the total.

Train Station Car Park Total → **200**					
Red	Silver	Black	White	Blue	Yellow
15%	10%	15%	35%	20%	5%
30	**20**	**30**	**70**	**40**	10

Shopping Centre Car Park Total → **1000**					
Red	Silver	Black	White	Blue	Yellow
10%	15%	10%	40%	15%	10%
100	**150**	100	**400**	**150**	**100**

4 Each grid represents one whole. Shade each fraction then complete the missing amounts.

Shade $1\frac{3}{4}$

$\frac{175}{100}$ → **1.75** → **175** %

Shade $1\frac{2}{5}$

$\frac{140}{100}$ → **1.4** → **140** %
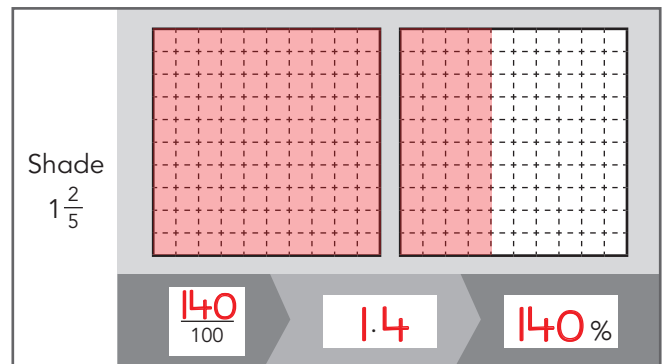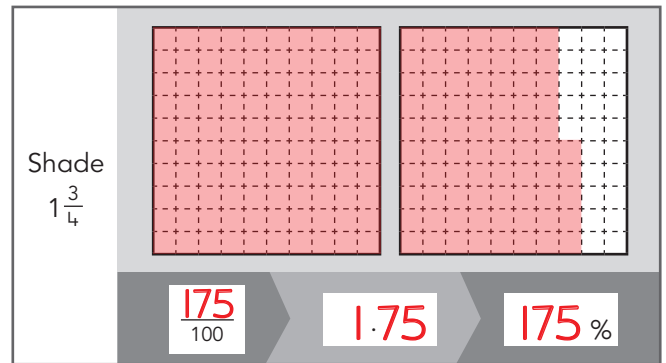
MONEY & FINANCIAL MATHEMATICS

5 Show the percentage of each amount.

	$48.00	$105.00	$9.40	$1.70
10%	**$4.80**	**$10.50**	**94c**	**17c**

	$80.00	$100.00	$12.60	$5.20
25%	**$20**	**$25**	**$3.15**	**$1.30**

	$60.00	$48.00	$12.40	$1.60
75%	**$45**	**$36**	**$9.30**	**$1.20**

i A **parallelogram** is a quadrilateral that has exactly 2 pairs of parallel sides.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

6 ✱ Change to the same units. Then add to find the total.
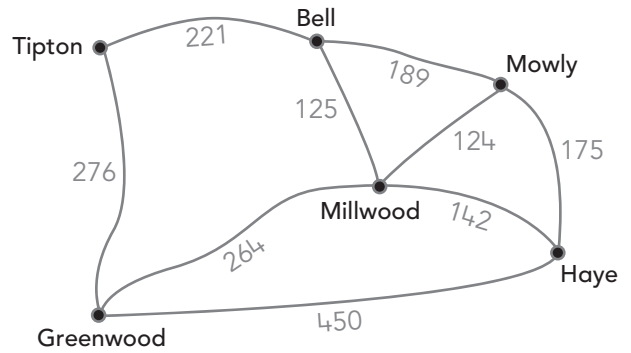
| 1.7 m |
| 58 cm |
| 3525 mm |

Total = **580.5 cm**

| 0.36 m |
| 8 cm |
| 510 mm |

Total = **95 cm**

7 Calculate the surface area of these prisms.

3 cm 2 cm
6 cm

72 cm²

2.5 cm
4 cm
7 cm

III cm²

8 The distances on the map are shown in kilometres.

Tipton — 221 — Bell
125
189 — Mowly
276
124 175
Millwood 142
264
450 Haye
Greenwood

a. What is the shortest route from Haye ⟶ Tipton?

Haye ➡ Millwood ➡ Bell ➡ Tipton

b. How many kilometres is that route? **488** km

SHAPE

9 Colour the parallelograms.

STATISTICS & PROBABILITY
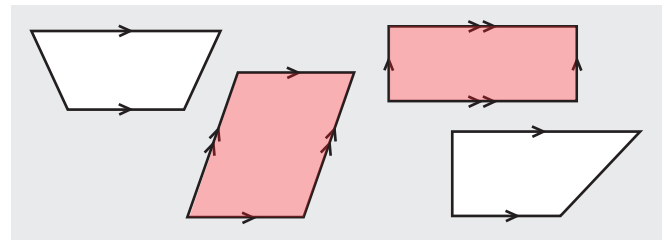
CHANCE ✱

10 Play this probability game at home.

Rules:

a. Place 10 counters (or buttons) on numbers on the game board, up to 3 counters on any number.

b. Roll 2 regular dice and get the total.

c. Remove 1 counter if it is on that total.

d. Continue rolling until all counters are removed.

If playing against an opponent, draw another game board. The winner is the first to remove all their counters.

e. What did you discover about this game?

Game board

1	2	3	4
5	6	7	8
9	10	11	12

TESTER

Which 2 operations will make this number sentence true?

6 **×** 12 = 144 **÷** 2

Write your answers in the boxes.

PARENT/CARER SIGNATURE _____

NAME _____

STEP IT UP! REVIEW 3

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write **>** or **<** to show true comparisons.

–3 **<** 8	–5 **<** 4	–5 **>** –7
2 **>** –4	–2 **<** 1	0 **>** –1

2 Write the temperature shown on each thermometer. Then calculate the difference.

Min. –2°C Max. 13°C	Min. –12°C Max. 7°C	Min. –7°C Max. 23°C
Difference 15 °C	Difference 19 °C	Difference 30°C

3 Break each number into parts to divide.

760 ÷ 4 = **190**
400 + **360**

520 ÷ 4 = **130**
400 + **120**

4 Use factors to divide these.

÷ 30
420 **42** **14**
÷10 **÷3**

÷ 28
700 **100** **25**
÷7 **÷4**

5 Use a written method to solve these.

```
    2 6
×   3 4
  104
  780
  884
```

```
    4 3
×   5 7
  301
 2150
 2451
```

```
    6 5
×   4 9
  585
 2600
 3185
```

FRACTIONS & DECIMALS

6 Write the missing parts that match.

$\frac{4}{5}$ = $\frac{80}{100}$ = **80** %

$1\frac{4}{10}$ = $\frac{140}{100}$ = **140**%

7 Match each decimal to the number line. Then write the closest **whole** number.

3 2.68   **4** 4.03   **4** 3.72

2 ——— 3 ——— 4 ——— 5

3.06 **3**   2.8 **3**   4.48 **4**

MONEY & FINANCIAL MATHEMATICS

8 Break each amount into parts then answer.

$39.20 ÷ 4 = **$9.80**
$36 + $3.20

$92.80 ÷ 8 = **$11.60**
$80 + $12.80

9 Show the percentage of each amount.

25%	$80.00	$48.00	$24.80	$52.60	$5.20
	$20	**$12**	**$6.20**	**$13.15**	**$1.30**

10 Express the answer in the most appropriate way.

5 people equally share $496. How much does each get?   **$99.20**

PATTERNS & ALGEBRA

11 Write the missing IN and OUT numbers.

IN		OUT
3.6	×100	**360**
0.25		25
0.084		8.4
12.7		**1270**

IN		OUT
46	÷10	**4.6**
357		35.7
3.9		**0.39**
45.6		4.56

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

12 Round the dimensions to **estimate** the area. Then calculate the exact area.

3.7 m — 9 m
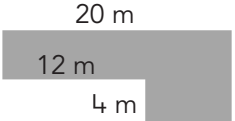
Estimate = **36** m²

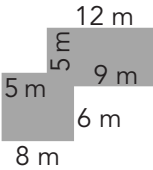Exact area = **33.3** m²

5.1 m — 8.2 m

Estimate = **40** m²
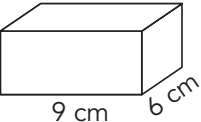
Exact area = **41.82** m²

13 Calculate these areas.

20 m, 4 m, 12 m, 4 m

112 m²

12 m, 5 m, 9 m, 5 m, 7 m, 6 m, 8 m
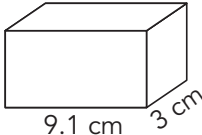
125 m²

14 Calculate the surface area of each prism.

4 cm, 9 cm, 6 cm

228 cm²

5 cm, 9.1 cm, 3 cm

175.6 cm²

15 Convert to the same unit of measurement. ✱ Then calculate the total.

4 m	**400 cm**
265 cm	**265 cm**
159 mm	**15.9 cm**
Total =	**680.9 cm**

2.5 m	**250 cm**
158 cm	**158 cm**
106 mm	**10.6 cm**
Total =	**418.6 cm**

SHAPE

16 Draw a net using the dimensions shown.

5 mm, 5 mm, 5 mm, 5 mm, 20 mm
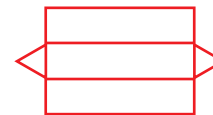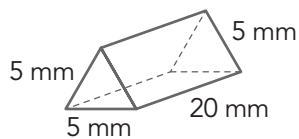
LOCATION & TRANSFORMATION

17 **a.** Plot these points on the grid.

A (3,1)   B (5,1)
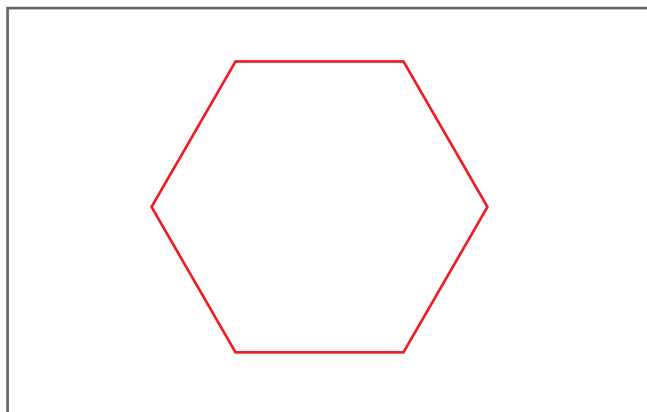C (7,3)   D (5,5)
E (3,5)   F (1,3)
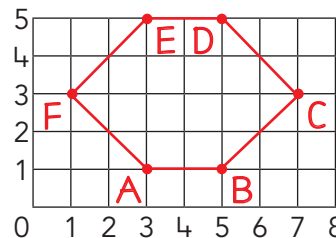
b. Connect the points in this order from A to F.

c. What shape have you drawn?   **hexagon**

GEOMETRIC REASONING

**18** Use a ruler and a protractor to draw a regular hexagon.

STATISTICS & PROBABILITY

CHANCE

19 Imagine you roll 2 regular dice and add the numbers. Use scrap paper to work out the likelihood of rolling each total.

1 $\frac{0}{0}$ 2 $\frac{1}{36}$ 3 $\frac{2}{36}$ 4 $\frac{3}{36}$

5 $\frac{4}{36}$ 6 $\frac{5}{36}$ 7 $\frac{6}{36}$ 8 $\frac{5}{36}$

9 $\frac{4}{36}$ 10 $\frac{3}{36}$ 11 $\frac{2}{36}$ 12 $\frac{1}{36}$

DATA REPRESENTATION & INTERPRETATION

20 Each ● represents 1 student.

Number of Books Read in Book Week: 1 2 3 4 5 6 7 8
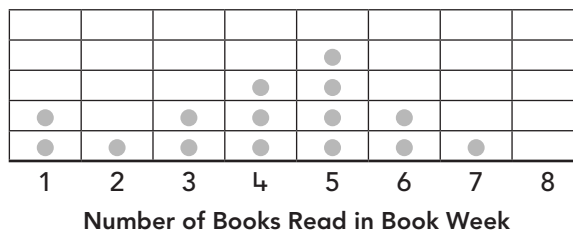
a. How many students read at least 2 books?   **13**

b. How many students read 4 or more books?   **10**

c. How many students participated?   **15**