NAME _____

MENTAL MATHS

ADDITION & SUBTRACTION

9 + 29 = **38**   **38** + 9 = 47   19 – 9 = **10**

5 + 8 = **13**   7 + **6** = 13   15 – 3 = **12**

32 + 9 = **41**   **3** + 8 = 11   18 – 5 = **13**

7 + 11 = **18**   9 + **26** = 35   21 – 19 = **2**

17 + 9 = **26**   **11** + 2 = 13   17 – 14 = **3**

MULTIPLICATION & DIVISION

9 × 4 = **36**   9 × **11** = 99   40 ÷ 10 = **4**

9 × 9 = **81**   **20** × 9 = 180   100 ÷ 10 = **10**

9 × 7 = **63**   9 × **50** = 450   80 ÷ 10 = **8**

9 × 1 = **9**   **12** × 9 = 108   60 ÷ 10 = **6**

9 × 2 = **18**   9 × **40** = 360   20 ÷ 10 = **2**

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

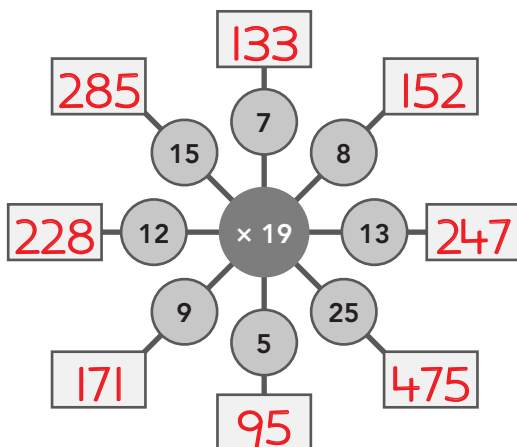**1** Write the numbers in words.

647 340   **six hundred and forty-seven thousand, three hundred and forty**

1 650 201   **one million, six hundred and fifty thousand, two hundred and one**

2 Loop the greatest number in each box.

642 289   640 999   **(694 000)**

805 940   **(809 541)**   805 898

1 567 241   **(1 569 200)**   1 562 304

568 242   **(578 429)**   569 009

3 Think ×20 to help work out ×19 in your head.
Write your answers around the outside.

× 19 wheel with inner values 15, 7, 8, 13, 25, 5, 9, 12 and outer answers:
285, **133**, **152**, **247**, **475**, **95**, **171**, **228**

4 Write the missing numbers.

26 shared by 5 is	38 shared by 3 is
5 remainder **1**	**12** remainder **2**
52 shared by 9 is	44 shared by 7 is
5 remainder **7**	**6** remainder **2**

MONEY & FINANCIAL MATHEMATICS

5 Three people equally share the cost.
Estimate each share.

$342 — about $ **114** each

$282 — about $ **94** each

$217 — about $ **72** each

$167 — about $ **56** each

PATTERNS & ALGEBRA

6 Write = or ≠ to make true sentences.

6 × 3 × 2	**=**	30 + 6	18 – 3 – 1	**≠**	2 × 8
5 + 7 + 3	**=**	45 ÷ 3	40 + 32	**=**	9 × 8
90 + 30	**≠**	180 – 70	100 – 52	**≠**	8 × 7
81 ÷ 9	**≠**	58 – 47	250	**≠**	2 × 25
65 – 17	**≠**	4 × 9	4 + 7 + 9	**=**	60 ÷ 3

ℹ️ You can **use a fact you know** to help you multiply nearby numbers.
For example, when you *see* 11 × 19 *think* 11 × 20 less 11 = 209.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

7 Look at the calendar.

December 2003						
S	M	T	W	Th	F	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

a. Write the missing dates on the calendar.

b. What day is 25 December? **Tuesday**

c. What date is the 2nd Wednesday? **12/12/03**

d. What day is 1 January 2004? **Tuesday**

e. What is the date 2 weeks from 6 December? **20/12/03**

f. What day was 30 November? **Friday**

8 Write these as 24-hour times.

5 p.m.	**17:00**	7:30 a.m.	**07:30**
2 a.m.	**02:00**	10:15 p.m.	**22:15**
6:30 a.m.	**06:30**	2:50 p.m.	**14:50**
9:41 p.m.	**21:41**	11:45 a.m.	**11:45**

9

Bus timetable			
Beach	Shops	Park St.	City
09:30	09:45	09:51	10:01
11:00	11:15	11:21	11:31
13:07	13:22	13:28	13:38
15:50	16:05	16:11	16:21

a. How many minutes is the bus trip from the beach to the city? **31** minutes

b. How many minutes is the bus trip from the shops to Park Street? **6** minutes

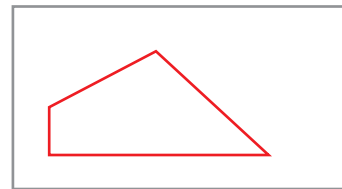**c.** If you arrived at the shops at 10:50, how many minutes is it until the next bus? **25** minutes

SHAPE
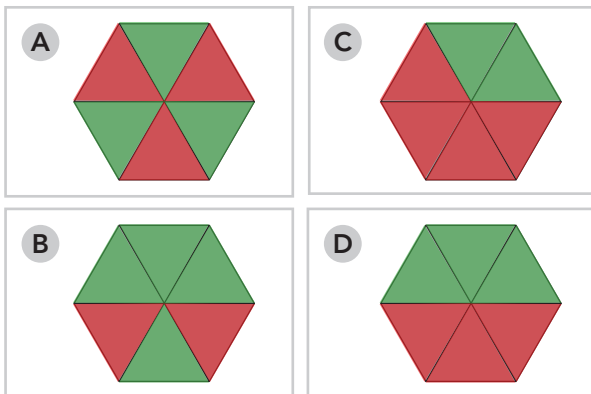
10 Identify and mark the parallel sides in each shape.
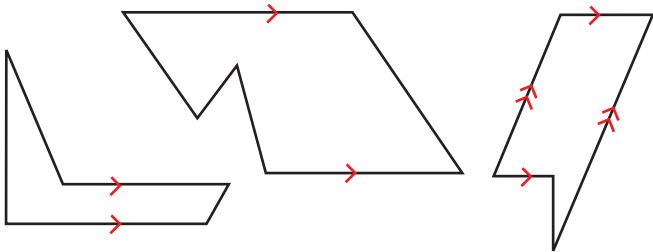
GEOMETRIC REASONING

11 ✳ Draw a shape that has at least 1 right angle, 1 acute angle and 1 obtuse angle.

STATISTICS & PROBABILITY

CHANCE

12

a. On which spinners are red and green equally likely? **A** and **D**

b. On which spinner is green more likely than red? **B**

c. On which spinner is green less likely than red? **C**

d. ✳ What fraction describes the chance of spinning red on **A** and **D**? $\frac{3}{6}$

e. ✳ What fraction describes the chance of spinning red on **C**? $\frac{2}{3}$

TESTER

Which 2 triangles are used in this picture?

- ○ isosceles and equilateral
- 🔴 equilateral and scalene
- ○ right angle and scalene
- ○ scalene and isosceles

Colour one bubble.

PARENT/CARER SIGNATURE _____ DATE _____

MENTAL MATHS
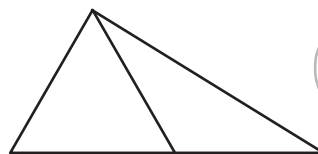
ADDITION & SUBTRACTION

25 + 6 = **31**	18 – **11** = 7	56 – 9 = **45**
33 + 6 = **39**	**17** – 9 = 8	21 – 9 = **12**
64 + 6 = **70**	9 – **6** = 3	13 – 9 = **4**
87 + 6 = **93**	**18** – 6 = 12	11 – 9 = **2**
46 + 6 = **52**	19 – **16** = 3	37 – 9 = **28**

MULTIPLICATION & DIVISION

2 × 4 = **8**	30 ÷ 3 = **10**	**33** ÷ 3 = 11
2 × 1 = **2**	6 ÷ 3 = **2**	**60** ÷ 3 = 20
2 × 10 = **20**	12 ÷ 3 = **4**	**45** ÷ 3 = 15
7 × 2 = **14**	18 ÷ 3 = **6**	**75** ÷ 3 = 25
9 × 2 = **18**	27 ÷ 3 = **9**	**36** ÷ 3 = 12

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Use all the digits. Write the greatest number possible.

a. | 0 | 5 | 7 | 2 | 1 | 8 | **875 210**

b. | 7 | 5 | 9 | 0 | 0 | 8 | **987 500**

c. | 2 | 1 | 7 | 4 | 8 | 2 | **874 221**

d. | 3 | 2 | 4 | 8 | 6 | 0 | **864 320**

2 Calculate these. Show your thinking.

60 x 6 = 360 **3 x 6 = 18** 63 × 6 = **378**	**70 x 5 = 350** **4 x 5 = 20** 74 × 5 = **370**
80 x 3 = 240 **4 x 3 = 12** 84 × 3 = **252**	**60 x 4 = 240** **7 x 4 = 28** 67 × 4 = **268**

3 Complete the parts. Then write the answer.

324 ÷ 3 = **108** is the same as **300** ÷ 3 plus **24** ÷ 3	816 ÷ 8 = **102** is the same as **800** ÷ 8 plus **16** ÷ 8
921 ÷ 3 = **307** is the same as **900** ÷ 3 plus **21** ÷ 3	832 ÷ 4 = **208** is the same as **800** ÷ 4 plus **32** ÷ 4

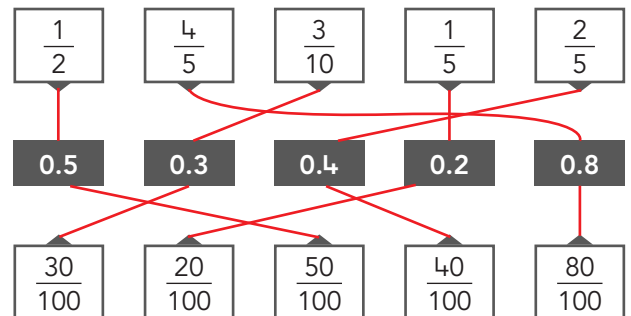**4** **a.** Write all the even multiples of 3 less than 60.

6, 12, 18, 24, 30, 36, 42, 48, 54

b. Write all the even multiples of 9 less than 100.

18, 36, 54, 72, 90

FRACTIONS & DECIMALS

5 Connect equivalent fractions and decimals.

$\frac{1}{2}$	$\frac{4}{5}$	$\frac{3}{10}$	$\frac{1}{5}$	$\frac{2}{5}$

0.5	0.3	0.4	0.2	0.8

$\frac{30}{100}$	$\frac{20}{100}$	$\frac{50}{100}$	$\frac{40}{100}$	$\frac{80}{100}$

MONEY & FINANCIAL MATHEMATICS

6 Calculate the change from $50.

$18.90	$32.50
Change $ **31.10**	Change $ **17.50**
$41.25	$22.95
Change $ **8.75**	Change $ **27.05**

ℹ️ You can use a **place-value strategy** to multiply numbers with two or more digits. For example, when you *see* 7 × 89 *think* 7 × 80 plus 7 × 9.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

7 Look at the measurement labels. Choose and write the most suitable label beside each measure.

mL	L	g	kg	mm	cm	m
km	seconds	minutes	hours	days	weeks	years

Length of a football field	m
Watching a tree grow	years
Doing 5 star jumps	seconds
A measure of cough medicine	mL
Length of an ant	mm
Mass of a golf ball	g
Water in a baby's pool	L
Distance from Perth to Sydney	km
Time to hang a load of washing	minutes
Mass of a large bag of potatoes	kg

SHAPE

8 Draw a prism.
✱ Then draw a pyramid inside the prism. Use a ruler.

LOCATION & TRANSFORMATION

9
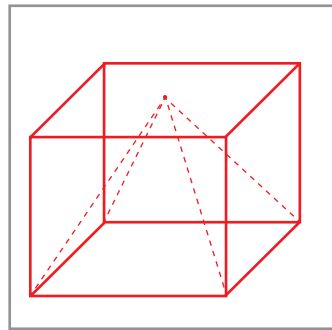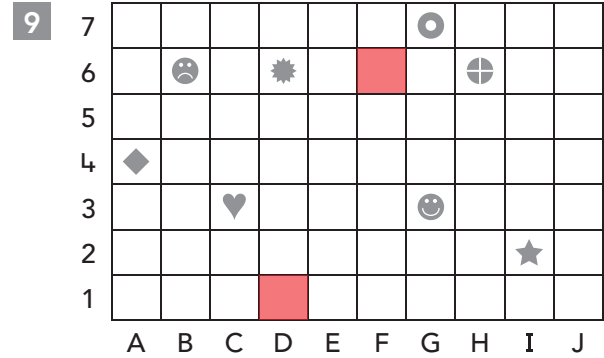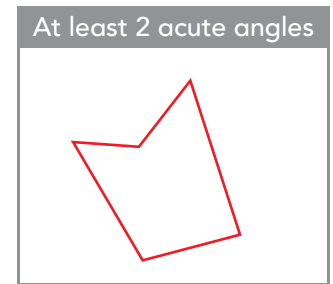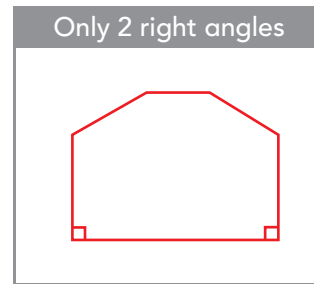
a. Write the grid reference for each of these.

| ⊕ H6 | ♥ C3 | ★ I2 | ◆ A4 |
| ✹ D6 | ☹ B6 | ⊙ G7 | ☺ G3 |

b. Start at ☺. Follow each path below. Colour the end squares red.
- Go north 2, west 3, south 4.
- Go south 2, west 2, north 5, east 1.

GEOMETRIC REASONING ✱

10 Draw a shape to match each label.

Only 2 right angles	At least 2 acute angles

STATISTICS & PROBABILITY

CHANCE

11 Write a fraction to describe the chance
✱ of spinning each of these.

red $\frac{1}{4}$ blue $\frac{1}{8}$

green $\frac{1}{2}$ yellow $\frac{1}{8}$

red or green $\frac{3}{4}$ blue or yellow $\frac{1}{4}$

12 a. Look at the fractions in this table. Colour this spinner to match.

Colour	Fraction
red	$\frac{3}{8}$
yellow	$\frac{1}{2}$
green	$\frac{1}{8}$

b. Write a fraction to describe the chance of **not** spinning each colour.

red	green	yellow
$\frac{5}{8}$	$\frac{7}{8}$	$\frac{1}{2}$

TESTER

Which is the greatest amount?

$1\frac{3}{4}$ L ⬤ 1400 mL ◯ $1\frac{1}{2}$ L ◯ 1390 mL ◯

Colour one bubble.

PARENT/CARER SIGNATURE _____ DATE _____

MENTAL MATHS

ADDITION & SUBTRACTION

9 + 83 = **92**	**12** – 5 = 7	20 – 12 = **8**
6 + 4 = **10**	13 – **8** = 5	20 – 14 = **6**
57 + 9 = **66**	**16** – 9 = 7	18 – 13 = **5**
4 + 17 = **21**	15 – **9** = 6	21 – 16 = **5**
46 + 9 = **55**	**12** – 4 = 8	17 – 11 = **6**

MULTIPLICATION & DIVISION

3 × 3 = **9**	12 ÷ 4 = **3**	**100** ÷ 4 = 25
3 × 5 = **15**	20 ÷ 4 = **5**	**48** ÷ 4 = 12
7 × 3 = **21**	8 ÷ 4 = **2**	**60** ÷ 4 = 15
3 × 9 = **27**	28 ÷ 4 = **7**	**88** ÷ 4 = 22
2 × 3 = **6**	40 ÷ 4 = **10**	**44** ÷ 4 = 11

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Shade the correct answer.

odd number + odd number is always   [odd] **even**

odd number + even number is always   **odd** [even]

even number + even number is always   [odd] **even**

odd number × odd number is always   **odd** [even]

odd number × even number is always   [odd] **even**

even number × even number is always   [odd] **even**

2 Write **odd** or **even**.

21 × 12 **is** → **even**	53 × 29 **is** → **odd**
21 + 38 **is** → **odd**	15 × 32 **is** → **even**
15 × 17 **is** → **odd**	36 + 48 **is** → **even**

MONEY & FINANCIAL MATHEMATICS

3 Work out the difference between these prices. Show the steps you used.

● $325.50   ● $116.36

```
 325      209.50
–100       –0.36
 225      209.14
 –16
 209
```

Difference is $ **209.14**

● $256.98   ● $174.35

```
 256       82.98
–100       –0.35
 156       82.63
 –74
  82
```

Difference is $ **82.63**

● $406.19   ● $213.65

```
 406      193.19
–200       –0.65
 206      192.54
 –13
 193
```

Difference is $ **192.54**

● $560.95   ● $275.96

```
 560      285.95
–200       –0.96
 360      284.99
 –75
 285
```

Difference is $ **284.99**

4 Work out how much is left in the purse after buying the item. Show the steps you used.

$24.70   ● $11.80

```
 24       13.70
–11       –0.80
 13       12.90
```

$ **12.90**

$31.50   ● $18.90

```
 31       13.50
–18       –0.90
 13       12.60
```

$ **12.60**

$38.20   ● $23.70

```
 38       15.20
–23       –0.70
 15       14.50
```

$ **14.50**

$41.40   ● $16.60

```
 41       25.40
–16       –0.60
 25       24.80
```

$ **24.80**

5 Use a calculator to work out how much is left in the wallet after buying these items.

$50.00   2 of these ● $3.65 + 3 of these ● $8.90 = $ **16.00**

$75.30   4 of these ● 88c + 2 of these ● $24.95 = $ **21.88**

ℹ You can count on in different ways to **work out the change** you will get. For example, if you have $46.30 and buy an item for $24.60 think $24.60 + 40c + $15 + $6.30 = $46.30. The change will be $21.70.
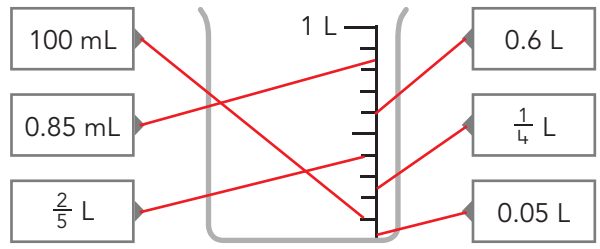
MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

6 Show the different ways to write these amounts.

Whole number	Common fraction	Decimal fraction
500 mL	$\frac{1}{2}$ L	0.5 L
250 mL	$\frac{1}{4}$ L	0.25 L
750 mL	$\frac{3}{4}$ L	0.75 L
200 mL	$\frac{1}{5}$ L	0.2 L
90 mL	$\frac{9}{100}$ L	0.09 L

7 Write each capacity as a decimal fraction of a litre.
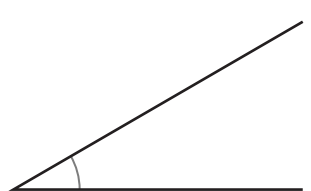
375 mL	50 mL
0.375 L	0.05 L

8 Draw lines to show the position on the scale.

100 mL
0.85 mL
$\frac{2}{5}$ L
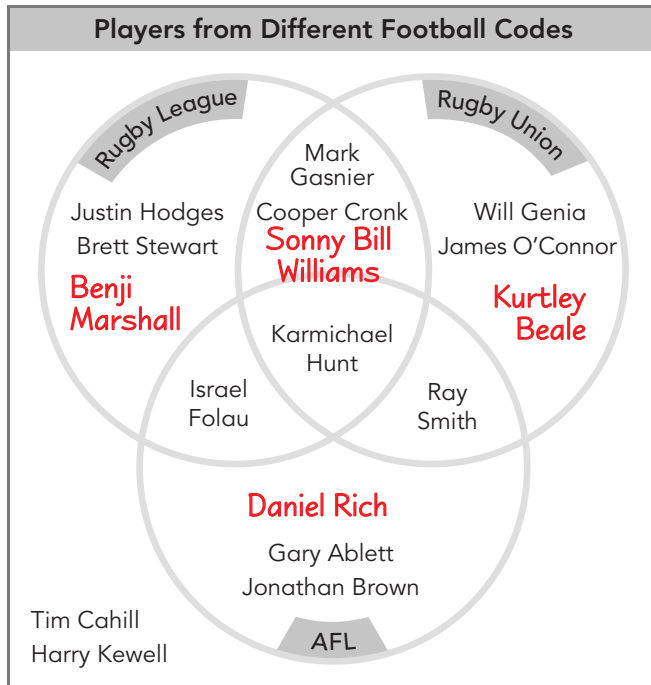
1 L

0.6 L
$\frac{1}{4}$ L
0.05 L

GEOMETRIC REASONING

9 Estimate the size of each angle.
Then measure the angles with a protractor.

Estimate * °
Exact 110 °

Estimate * °
Exact 30 °

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

10 Look at this 3-ring Venn diagram.

Players from Different Football Codes

Rugby League
Rugby Union
AFL

Mark Gasnier
Justin Hodges
Brett Stewart
Benji Marshall
Cooper Cronk
Sonny Bill Williams
Will Genia
James O'Connor
Kurtley Beale
Karmichael Hunt
Israel Folau
Ray Smith
Daniel Rich
Gary Ablett
Jonathan Brown
Tim Cahill
Harry Kewell

a. Name the only player who has played AFL, Union and League.

Karmichael Hunt

b. Israel Folau has played AFL and League.

c. Name the players who have played Union and League.

Mark Gasnier and Cooper Cronk

d. Name the players who have only played AFL.

Gary Ablett and Jonathan Brown

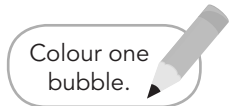**e.** What does the diagram tell you about Tim Cahill and Harry Kewell?

They have not played AFL, Union or League.

f. Write these players onto the diagram.
- Sonny Bill Williams — League and Union
- Kurtley Beale — Union
- Benji Marshall — League
- Daniel Rich — AFL

TESTER

Which number is **not** divisible by 3?

693   436   237   378

○   ●   ○   ○

Colour one bubble.

PARENT/CARER SIGNATURE _____   DATE _____

MENTAL MATHS

ADDITION & SUBTRACTION

8 + 6 = 14   7 + 8 = 15   18 − 5 = 13

8 + 8 = 16   5 + 14 = 19   19 − 15 = 4

11 + 5 = 16   6 + 16 = 22   24 − 7 = 17

7 + 4 = 11   9 + 14 = 23   25 − 13 = 12

5 + 9 = 14   5 + 18 = 23   23 − 8 = 15

MULTIPLICATION & DIVISION

5 × 4 = 20   15 ÷ 5 = 3   60 ÷ 5 = 12

9 × 4 = 36   25 ÷ 5 = 5   100 ÷ 5 = 20

4 × 1 = 4   40 ÷ 5 = 8   65 ÷ 5 = 13

7 × 4 = 28   10 ÷ 5 = 2   55 ÷ 5 = 11

10 × 4 = 40   30 ÷ 5 = 6   150 ÷ 5 = 30

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 List the first 10 multiples of each number.

2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

2 List the first 10 prime numbers and their factors.

PRIME	2	3	5	7	11	13	17	19	23	29	31
FACTORS 1	1	1	1	1	1	1	1	1	1	1	1
FACTORS 2	2	3	5	7	11	13	17	19	23	29	31

3 **a.** Draw jumps to label the multiples of 2 on the first number line and multiples of 5 on the second.
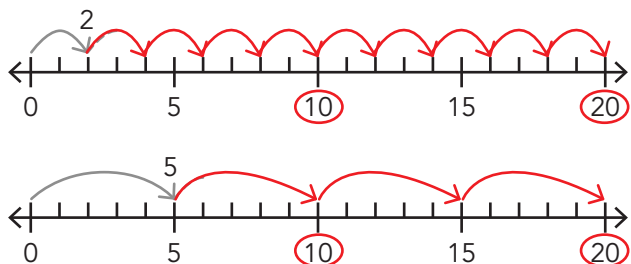
b. Loop the common multiples of 2 and 5.

4 **a.** List the first 3 common multiples of these numbers. Use your answers to Question 1.

3 and 4 → (12), 24, 36

6 and 9 → (18), 36, 54

4 and 8 → (16), 24, 32

b. Loop the lowest common multiple for each pair of numbers above.

MONEY & FINANCIAL MATHEMATICS

5 Calculate how much more is needed to buy the item. Show your working.

$12.45 • $18.36
18 −12 = 6   6.36 − 0.45 $ 5.91

$11.45 • $15.60
15 −11 = 4   4.60 − 0.45 $ 4.15

$18.49 • $37.20
37 −18 = 19   19.20 − 0.49 $ 18.71

$27.56 • $45.35
45 −27 = 18   18.35 − 0.56 $ 17.79

**6** Use a calculator to work out how much is left in the wallet after buying these items.

$100   4 of these • $6.95 + 5 of these • $13.28 = $ 5.80

The **multiples** of a number are the numbers you say when you start at 0 and count in steps of that number. For example, the multiples of 4 are 4, 8, 12, 16, 20, 24, and so on.

USING UNITS OF MEASUREMENT

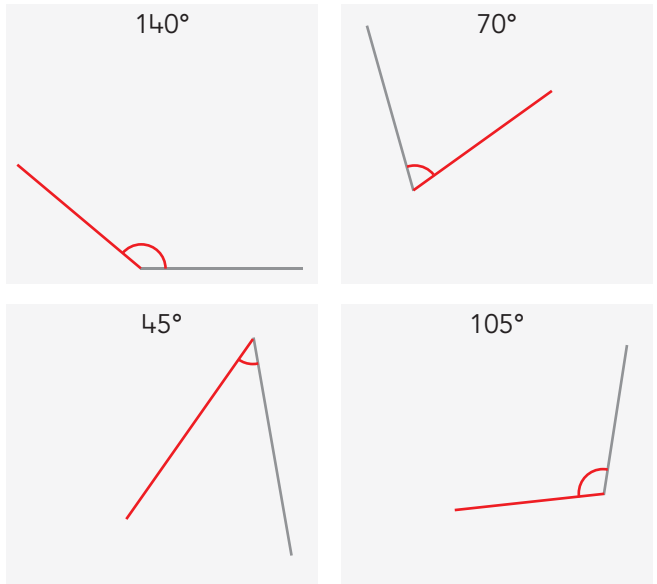**7** Write the amount of water in millilitres and litres.

1 L

700 mL

0. **7** L

500 mL

300 mL

0. **3** L
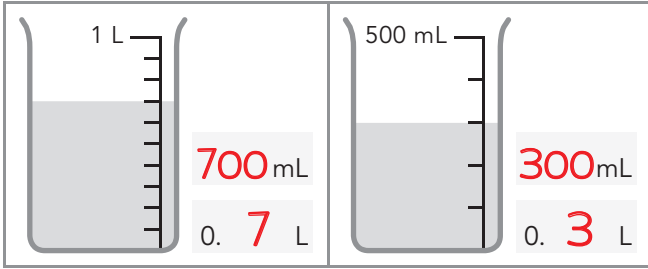
8 Shade the container to show the amount. Then write the amount 2 other ways.

1 L

$\frac{7}{10}$ L

700 mL

0. **7** L

500 mL

$\frac{1}{4}$ L

250 mL

0. **25** L
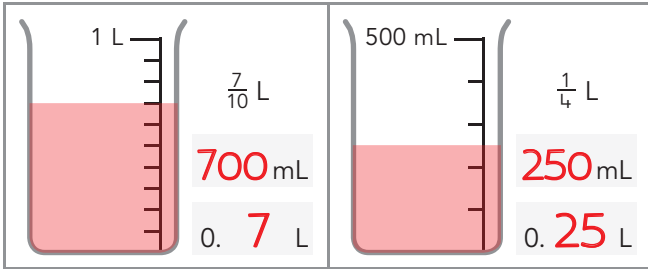
GEOMETRIC REASONING

9 Use a protractor to construct these angles. Mark the angle with an arc. One angle arm has been done for you.

140°

70°

45°

105°

DATA REPRESENTATION & INTERPRETATION

10 **a.** Write all the factors of 24, 40 and 100 into the 3-ring Venn diagram.

b. List all the common factors of 24, 40, and 100.

1, 2, 4

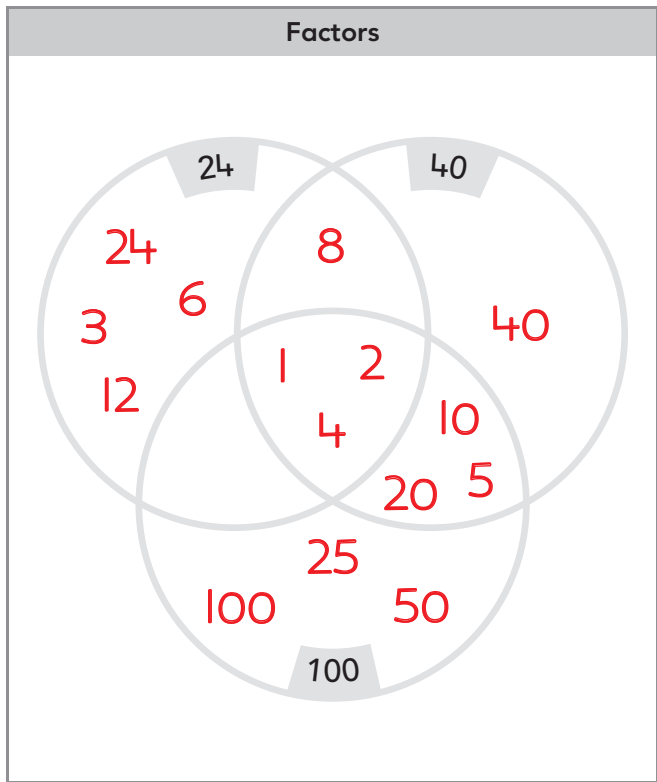**c.** List all the factors that **only** 24 and 40 have in common.

8

d. List all the factors that **only** 40 and 100 have in common.

5, 10, 20

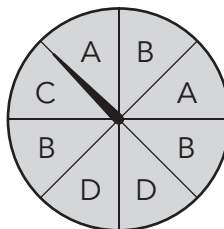**e.** How many factors are common to **only** 100 and 24?

0

f. List all the factors of 24, 40 and 100 that are not common.

3, 6, 12, 24, 25, 40, 50, 100

Factors

24

40

24

8

6

3

40

12

1   2

4

10

20   5

25

100   50

100

TESTER

On which letter is this spinner most likely to stop?

A   B   C   D
○   ●   ○   ○

A B
C   A
B   B
D D

Colour one bubble.

PARENT/CARER SIGNATURE _____   DATE _____

✱ Answers will vary. This is one example.

NAME _____

MENTAL MATHS

ADDITION & SUBTRACTION

14 + 16 = **30**   **12** – 7 = 5   11 – 4 = **7**

8 + 15 = **23**   15 – **6** = 9   14 – 5 = **9**

11 + 15 = **26**   **17** – 5 = 12   16 – 9 = **7**

9 + 19 = **28**   11 – **8** = 3   12 – 3 = **9**

15 + 15 = **30**   **18** – 7 = 11   13 – 6 = **7**

MULTIPLICATION & DIVISION

2 × 5 = **10**   18 ÷ 6 = **3**   **66** ÷ 6 = 11

10 × 5 = **50**   60 ÷ 6 = **10**   **120** ÷ 6 = 20

5 × 5 = **25**   12 ÷ 6 = **2**   **90** ÷ 6 = 15

8 × 5 = **40**   6 ÷ 6 = **1**   **300** ÷ 6 = 50

7 × 5 = **35**   54 ÷ 6 = **9**   **72** ÷ 6 = 12

NUMBER & ALGEBRA

FRACTIONS & DECIMALS

1 Use different colours to show both fractions. Then write the total fraction coloured.

$\frac{3}{10} + \frac{5}{10} = \frac{8}{10}$ $\frac{4}{8} + \frac{2}{8} = \frac{6}{8}$

$\frac{2}{12} + \frac{9}{12} = \frac{11}{12}$ $\frac{2}{5} + \frac{2}{5} = \frac{4}{5}$

2 Colour the first fraction then cross out the coloured parts to show the second fraction. Write the remaining coloured parts as a fraction.

$\frac{9}{10} - \frac{3}{10} = \frac{6}{10}$ $\frac{5}{8} - \frac{2}{8} = \frac{3}{8}$

$\frac{10}{12} - \frac{4}{12} = \frac{6}{12}$ $\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$

3 Write the answers. Use this number line to help.

$\frac{5}{8} + \frac{1}{8} = \frac{6}{8}$ $\frac{6}{8} + \frac{3}{8} = 1\frac{1}{8}$

$\frac{4}{8} + \frac{8}{8} = 1\frac{4}{8}$ $\frac{7}{8} + \frac{4}{8} = 1\frac{3}{8}$

$\frac{7}{8} - \frac{5}{8} = \frac{2}{8}$ $1\frac{1}{8} - \frac{3}{8} = \frac{6}{8}$

$1\frac{6}{8} - \frac{3}{8} = 1\frac{3}{8}$ $1\frac{4}{8} - \frac{7}{8} = \frac{5}{8}$

MONEY & FINANCIAL MATHEMATICS

4 Estimate the amount of each share. **✱**

Share each by 3.

$355	$188	$252
About $ **115** each	About $ **62** each	About $ **84** each

Share each by 5.

$362	$419	$455
About $ **72** each	About $ **83** each	About $ **90** each

ℹ Add the length and the width then multiply by 2 to work out the **perimeter** of an oblong.
Multiply the length by the width to work out the **area** of an oblong.
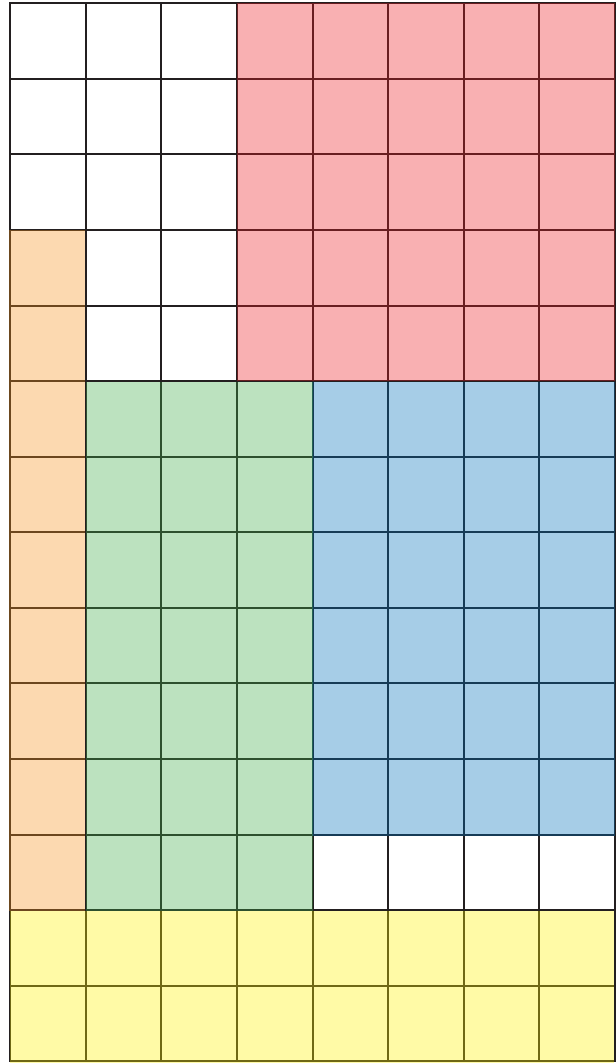
USING UNITS OF MEASUREMENT

5 Calculate the perimeter and area of each oblong.

9 cm
5 cm

Perimeter = **28** cm
Area = **45** cm²

7 cm
8 cm

Perimeter = **30** cm
Area = **56** cm²

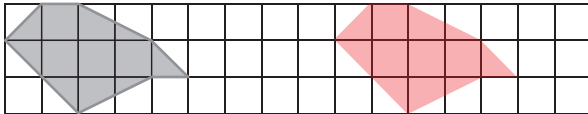**6** On the right, draw the different oblongs that have a perimeter of 20 cm, then complete this table.

Length	Width	Area	Perimeter
5 cm	5 cm	25 cm²	20 cm
6 cm	4 cm	24 cm²	20 cm
7 cm	3 cm	21 cm²	20 cm
8 cm	2 cm	16 cm²	20 cm
9 cm	1 cm	9 cm²	20 cm

LOCATION & TRANSFORMATION

7 Draw this shape after a slide 9 squares right.

CHANCE

8 a. Toss a coin 10 times.

✳
- Each time you toss a head, colour a piece of the pie chart moving clockwise.
- Each time you toss a tail, colour a piece of the pie chart moving anticlockwise.
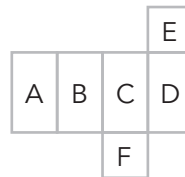
b. Complete this table.

Outcome	Number of tosses	Fraction of whole
Heads		
Tails		

Heads or Tails

←START→
Tails   Heads

☐ Heads
☐ Tails

When this net is folded, which face will **not** be touching Face A?

Face **C**

		E	
A	B	C	D
		F	

Write your answer in the box.

PARENT/CARER SIGNATURE _____ DATE _____

MENTAL MATHS

ADDITION & SUBTRACTION

6 + 6 = **12**	8 + **12** = 20	32 − 9 = **23**
8 + 5 = **13**	**9** + 15 = 24	17 − 14 = **3**
3 + 9 = **12**	9 + **7** = 16	12 − 8 = **4**
4 + 7 = **11**	**9** + 18 = 27	24 − 9 = **15**
7 + 10 = **17**	5 + **25** = 30	8 − 5 = **3**

MULTIPLICATION & DIVISION

6 × 4 = **24**	70 ÷ 7 = **10**	**140** ÷ 7 = 20
6 × 10 = **60**	21 ÷ 7 = **3**	**77** ÷ 7 = 11
6 × 6 = **36**	35 ÷ 7 = **5**	**105** ÷ 7 = 15
6 × 9 = **54**	28 ÷ 7 = **4**	**84** ÷ 7 = 12
6 × 7 = **63**	56 ÷ 7 = **8**	**210** ÷ 7 = 30

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write each number in the correct part of the Venn diagram.

9   20   18   15   35   28   30   14   17   60

Numbers less than 100

20
Divisible by 3: 18, 30, 9
Divisible by 5: 35
(both) 15, 30, 60
14
28
17

14   16   20   50   22   28   40   36   30   81

Numbers less than 100

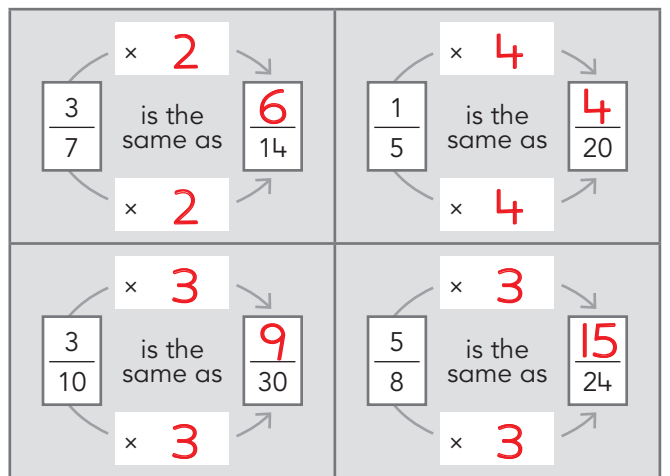81
Divisible by 4: 36, 16, 28
Divisible by 10: 30, 50
(both) 20, 40
14
22
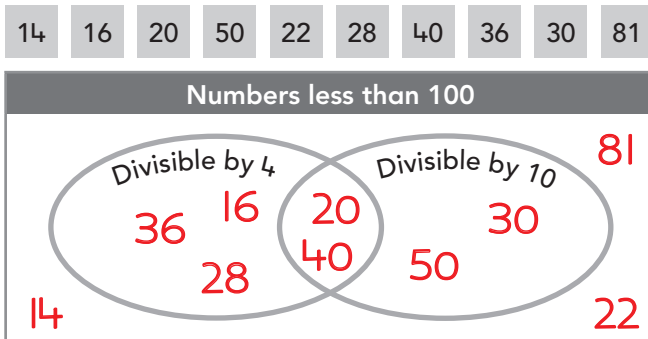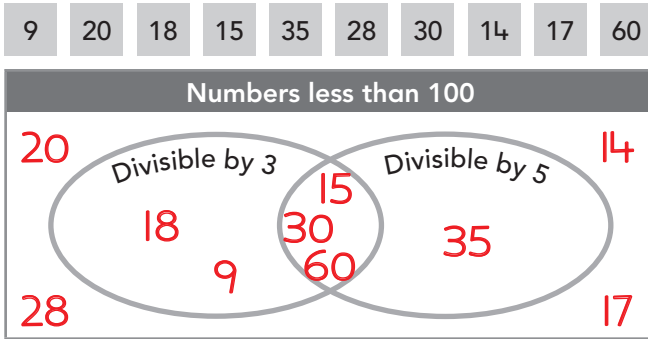
FRACTIONS & DECIMALS

**2** Colour the first fraction. Draw more lines to show the second fraction. Write the missing numbers.

× **2**
$\frac{2}{5}$ is the same as $\frac{4}{10}$
× **2**

× **3**
$\frac{3}{4}$ is the same as $\frac{9}{12}$
× **3**

3 Complete these equivalent fractions.

× **2**
$\frac{3}{7}$ is the same as $\frac{6}{14}$
× **2**

× **4**
$\frac{1}{5}$ is the same as $\frac{4}{20}$
× **4**

× **3**
$\frac{3}{10}$ is the same as $\frac{9}{30}$
× **3**

× **3**
$\frac{5}{8}$ is the same as $\frac{15}{24}$
× **3**
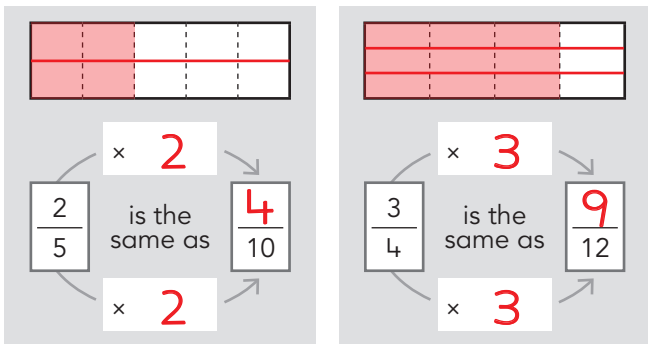
PATTERNS & ALGEBRA

4 Write numbers to make the balance picture true. Then write a matching number sentence.

4 4 4 4   **8 8**

4 × **4** = 8 × **2**

6 6 6   9 9

6 × **3** = 9 × **2**

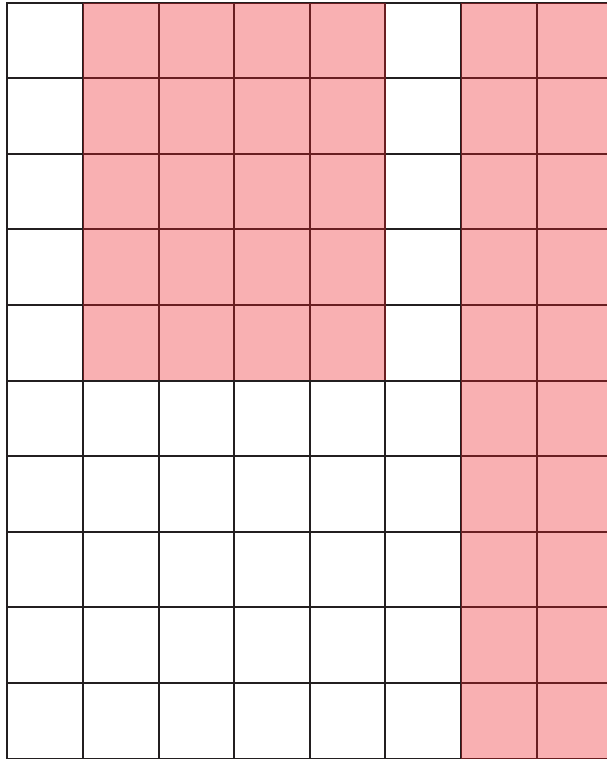**14 14**   7 7 7 7

14 × **2** = 7 × **4**
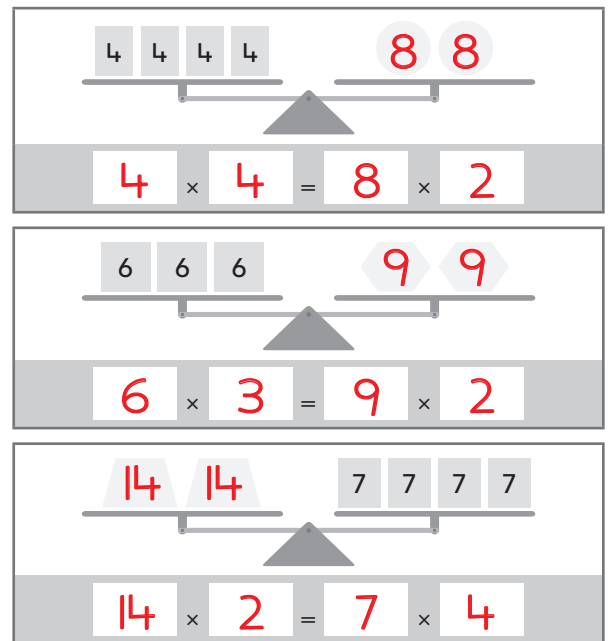
ℹ You can find an **equivalent fraction** by multiplying (or dividing) the numerator and denominator by the same number.

USING UNITS OF MEASUREMENT

5 Draw the other oblongs that have an area of 20 cm² below. Then complete the table.

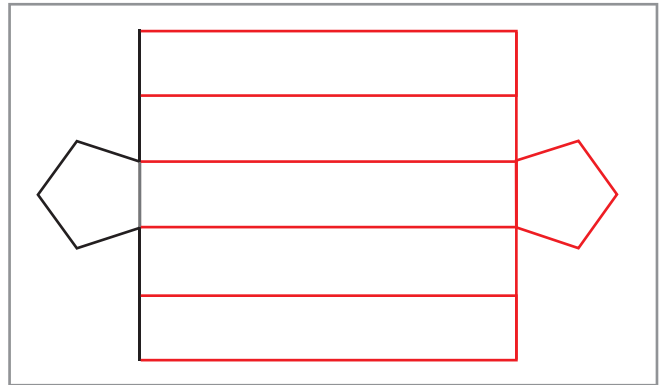| Length	Width	Area	Perimeter
20	1	20 cm²	42 cm
10	2	20cm²	24 cm
5	4	20cm²	18 cm

6 Double and halve to work out these areas.

50 cm
18 cm

18 × 50 is the same as

9 × 100 = 900 cm²

35 cm
16 cm

16 × 35 is the same as

8 × 70 = 560 cm²

45 cm
8 cm

8 × 45 is the same as

4 × 90 = 360 cm²

55 cm
12 cm

12 × 55 is the same as

6 × 110 = 660 cm²

SHAPE

7 Complete the net for a pentagonal-based prism.

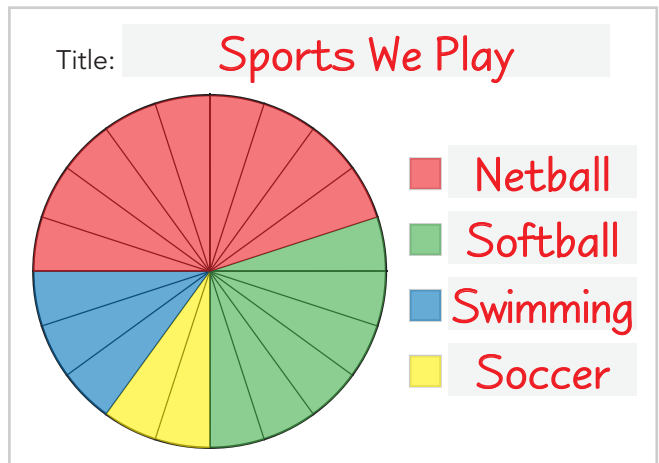## DATA REPRESENTATION AND INTERPRETATION

8 **a.** Use the data in this table to complete the pie chart.
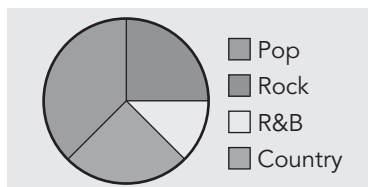
Netball	Softball	Swimming	Soccer
ⵌ IIII	ⵌ I	III	II

b. Write a fraction of the total to describe each sport.

Netball	Softball	Swimming	Soccer
$\frac{9}{20}$	$\frac{6}{20}$ or $\frac{3}{10}$	$\frac{3}{20}$	$\frac{2}{20}$ or $\frac{1}{10}$

Title: **Sports We Play**

- ■ Netball
- ■ Softball
- ■ Swimming
- ■ Soccer

This pie chart shows the type of music preferred by some students. What fraction of the total prefer rock music?

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

○   ○   ●   ○

- ■ Pop
- ■ Rock
- ☐ R&B
- ■ Country

Colour one bubble.

PARENT/CARER SIGNATURE _____   DATE _____

MENTAL MATHS

ADDITION & SUBTRACTION

9 + 8 = **17**	**5** + 12 = 17	10 – 3 = **7**
7 + 6 = **13**	6 + **13** = 19	14 – 8 = **6**
5 + 8 = **13**	**16** + 10 = 26	15 – 5 = **10**
12 + 7 = **19**	13 + **11** = 24	18 – 5 = **13**
11 + 9 = **20**	**17** + 6 = 23	11 – 9 = **2**

MULTIPLICATION & DIVISION

2 × 7 = **14**	16 ÷ 8 = **2**	**96** ÷ 8 = 12
5 × 7 = **35**	32 ÷ 8 = **4**	**160** ÷ 8 = 20
10 × 7 = **70**	24 ÷ 8 = **3**	**88** ÷ 8 = 11
7 × 7 = **49**	64 ÷ 8 = **8**	**240** ÷ 8 = 30
8 × 7 = **56**	80 ÷ 8 = **10**	**200** ÷ 8 = 25

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Complete the parts then write the answer.

927 ÷ 3 ▷ **900** ÷ 3 plus **27** ÷ 3 = **309**

642 ÷ 6 ▷ **600** ÷ 6 plus **42** ÷ 6 = **107**

2754 ÷ 9 ▷ **2700** ÷ 9 plus **54** ÷ 9 = **306**

4956 ÷ 7 ▷ **4900** ÷ 7 plus **56** ÷ 7 = **708**

4816 ÷ 8 ▷ **4800** ÷ 8 plus **16** ÷ 8 = **602**

2 Use the same strategy to complete these.

284 ÷ 4 = **71**	714 ÷ 7 = **102**
515 ÷ 5 = **103**	864 ÷ 8 = **108**
3624 ÷ 6 = **604**	3681 ÷ 9 = **409**
1530 ÷ 3 = **506**	3680 ÷ 4 = **920**

3 Complete these.

6 7 8 + 5 9 4 **1272**	7 2 7 + 6 9 3 **1420**	4 8 6 + 7 8 6 **1272**
8 9 6 + 7 2 4 **1620**	9 3 5 + 1 6 6 **1101**	6 2 7 + 3 9 4 **1021**

MONEY & FINANCIAL MATHEMATICS

4 Calculate the cost of a single item.

3 for $4.95	6 for $9.30	8 for $12.16
$ **1.65**	$ **1.55**	$ **1.52**
3 for $6.42	4 for $8.72	9 for $19.35
$ **2.14**	$ **2.18**	$ **2.15**

PATTERNS & ALGEBRA

5 Look for a pattern. Write the answers.

2700 ÷ 3 = **900**	3600 ÷ 4 = **900**
2700 ÷ 30 = **90**	3600 ÷ 40 = **90**
2700 ÷ 300 = **9**	3600 ÷ 400 = **9**

6 Connect expressions with the same answers.

450 ÷ 9	5400 ÷ 60	45 ÷ 9	54 ÷ 6

5400 ÷ 600	450 ÷ 90	4500 ÷ 90	540 ÷ 6

ℹ When you need to know the **price of one item** in a bulk pack, you divide the pack price by the number of items in the pack.

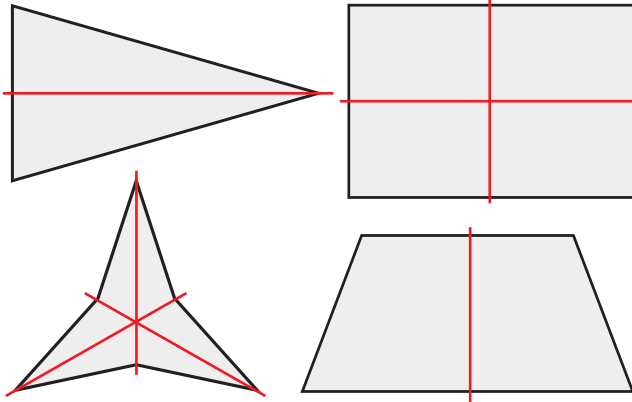* Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

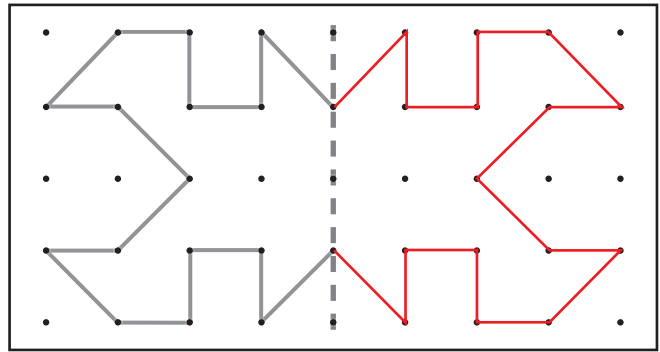### USING UNITS OF MEASUREMENT

7 Match the 12-hour and 24-hour times.

7:00 p.m.	6:25 a.m.	10:00 p.m.	7:00 a.m.
06:25	07:00	19:00	22:00

3:45 p.m.	04:15	7:45 a.m.	21:15
15:45	07:45	9:15 p.m.	4:15 a.m.

LOCATION & TRANSFORMATION

8 Draw all the mirror lines on these shapes.

9 Draw the other half to show reflective symmetry.

10 Draw 3 different shapes that
* each have exactly 2 mirror lines.
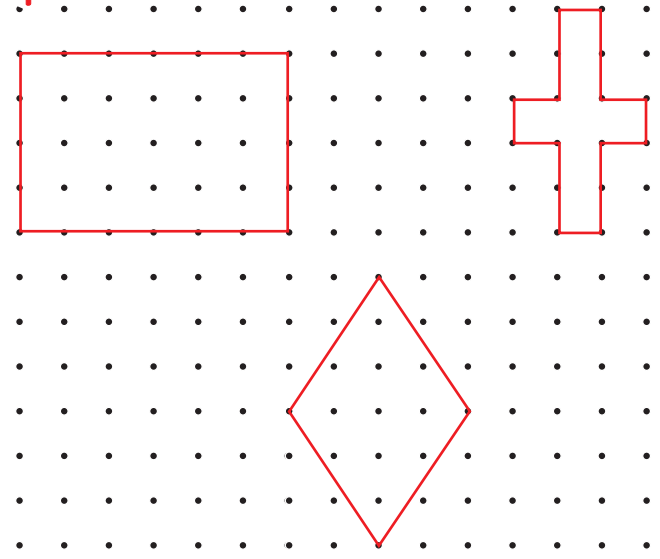
STATISTICS & PROBABILITY

CHANCE

11 a. This table shows the chance of spinning 5 different colours. Colour the spinner to match.

Black	Red	Blue	Pink	Yellow
$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{2}{12}$	$\frac{1}{12}$

b. Write how many of each colour you would expect from 24 spins.

Black	Red	Blue	Pink	Yellow
6	8	4	4	2
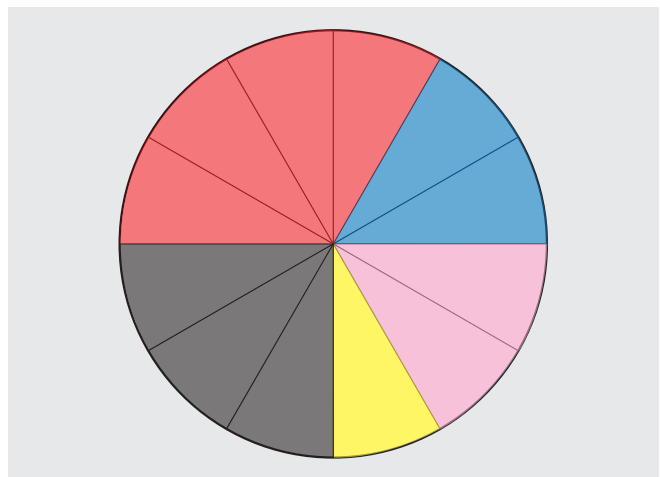
TESTER

Which diagram shows a flip right over the dotted line?

Colour one bubble.

○   ● (selected)   ○   ○

PARENT/CARER SIGNATURE _____   DATE _____

✱ **Answers will vary. This is one example.**

NAME _____

MENTAL MATHS

ADDITION & SUBTRACTION

7 + 14 = **21**
12 – **8** = 4
14 – 6 = **8**

4 + 19 = **23**
18 – 7 = 11
18 – 6 = **12**

12 + 15 = **27**
7 – 5 = 2
16 – 8 = **8**

13 + 8 = **21**
16 – **4** = 12
5 – 3 = **2**

16 + 6 = **22**
12 – 3 = 9
13 – 10 = **3**

MULTIPLICATION & DIVISION

8 × 2 = **16**
9 ÷ 9 = **1**
117 ÷ 9 = 13

8 × 8 = **64**
90 ÷ 9 = **10**
99 ÷ 9 = 11

5 × 8 = **40**
27 ÷ 9 = **3**
135 ÷ 9 = 15

8 × 9 = **72**
63 ÷ 9 = **7**
180 ÷ 9 = 20

6 × 8 = **48**
81 ÷ 9 = **9**
126 ÷ 9 = 14

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Use all these digits. Make these numbers.

| 4 | 0 | 7 | 8 | 1 | 2 |

- greatest number possible

8 7 4 2 1 0

- least number possible

1 0 2 4 7 8

- a number that is as close as possible to $\frac{1}{2}$ million

4 8 7 2 1 0

- ✱ a number that has 8 thousands

4 7 8 0 2 1

- ✱ a number that is between 100 000 and 200 000

1 8 2 4 7 0
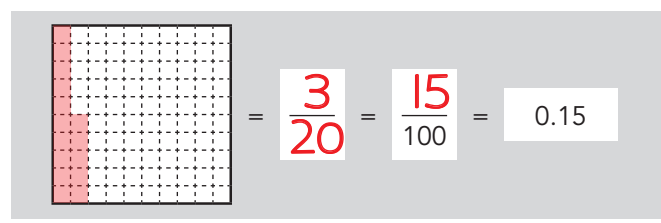
FRACTIONS & DECIMALS

2 Complete these to match.

= $\frac{1}{4}$ = $\frac{25}{100}$ = **0.25**

= $\frac{4}{5}$ = $\frac{80}{100}$ = 0.**8**

= $\frac{2}{5}$ = $\frac{40}{100}$ = 0.**4**

= $\frac{3}{20}$ = $\frac{15}{100}$ = **0.15**

PATTERNS & ALGEBRA

3 Write numbers to make each balance picture true. Then write a matching number sentence.

| 9 | 9 | 9 | 9 | | 18 | 18 |

9 × **4** = **18** × **2**

36 36 | 24 | 24 | 24 |

36 × **2** = **24** × **3**

25 **25** **25** | 15 | 15 | 15 | 15 | 15 |

25 × **3** = **15** × **5**

4 Connect expressions with the same answer.

| 4800 ÷ 60 | 2700 ÷ 300 | 48 ÷ 6 | 2700 ÷ 30 |

| 270 ÷ 30 | 480 ÷ 60 | 480 ÷ 6 | 270 ÷ 3 |

ℹ Shapes that have 1 or more reflection lines have **reflective symmetry**. Shapes that take 2 or more part turns to get back to a starting position have **rotational symmetry**.

MEASUREMENT & GEOMETRY

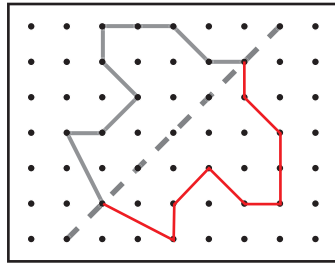### USING UNITS OF MEASUREMENT

5 Write these as 12-hour times. Use a.m. or p.m.
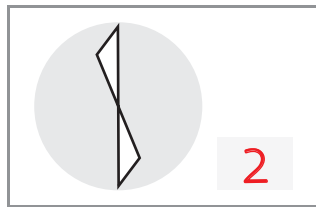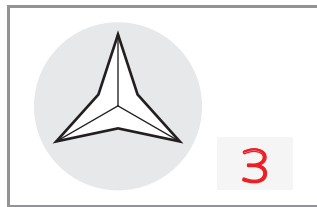
3 hours past midnight	**3:00 a.m.**
$2\frac{1}{2}$ hours before midnight	**9:30 p.m.**
$\frac{1}{4}$ to 6 in the morning	**5:45 a.m.**
20 minutes past 9 at night	**9:20 p.m.**

LOCATION & TRANSFORMATION

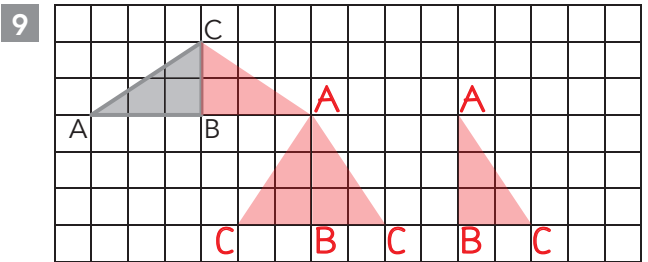**6** Draw the other half to show reflective symmetry.

7 Write the number of part turns each shape will take to return to its original position.

 3

 2

8 Draw a quadrilateral to match each label. ✳

- Has 4 reflection lines.
- Must turn 4 times to return to its starting position.

- Has 1 reflection line.
- Does not have rotational symmetry.

9

Follow this sequence of steps.
Draw and label the shape in each new position.

- Flip across line BC.
- Rotate 90° anticlockwise around A.
- Flip across line AB.
- Slide right 4 squares.

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

10 Twenty students voted for their favourite type of movie. This table shows the results.

Movie Type	Number of votes
Action	8
Comedy	6
Musical	3
Drama	2
Documentary	1

Complete the pie chart to match.

Students' Favourite Movies

- Action
- Comedy
- Musical
- Drama
- Documentary
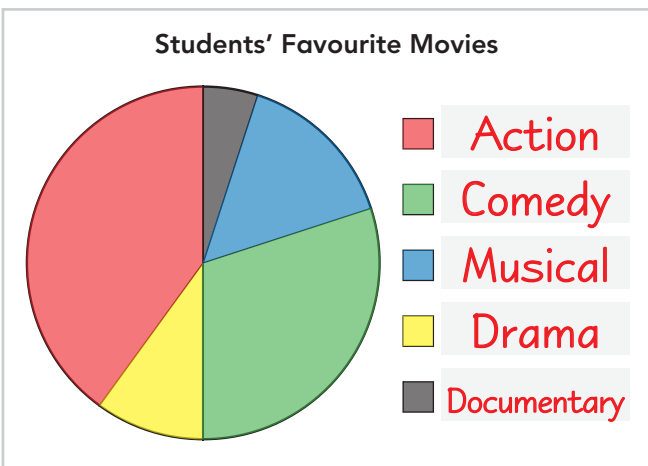
TESTER

Imagine you buy all of these items.

Which of these is the best estimate of how much change you will get from $100?

$25.90 $17.15 $6.99   Colour one bubble.

$56 ○ $48 ○ $52 ○ $50 ●

PARENT/CARER SIGNATURE _____   DATE _____

NUMBER & PLACE VALUE

1 Shade the correct answer.

36 + 48 =	odd	**even**
44 + 37 =	**odd**	even
39 + 25 =	odd	**even**

12 × 8 =	odd	**even**
16 × 9 =	odd	**even**
13 × 5 =	**odd**	even

2 a. Write the first 10 multiples of each number.

| 6 | 6 | 12 | ⑱ | 24 | 30 | �36 | 42 | 48 | ㊴ | 60 |
| 9 | 9 | ⑱ | 27 | �36 | 45 | ㊴ | 63 | 72 | 81 | 90 |

b. Loop the common multiples of 6 and 9.

3 Write the least common multiple for each pair.

| 4 and 6 → **1 or 2** | 5 and 7 → **1** | 3 and 10 → **1** |

4 Loop the prime numbers in this table.

| 15 | 16 | ⑰ | 18 | ⑲ | 20 | 21 | 22 | ㉓ | 24 |
| 25 | 26 | 27 | 28 | ㉙ | 30 | ㉛ | 32 | 33 | 34 |

FRACTIONS & DECIMALS

5 Complete these equivalent fractions.

× **3**
$\frac{4}{7}$ is the same as $\frac{12}{21}$
× **3**

× **6**
$\frac{4}{9}$ is the same as $\frac{24}{54}$
× **6**

6 Write the answers.

$\frac{6}{10} + \frac{3}{10} = \frac{9}{10}$	$\frac{8}{11} - \frac{3}{11} = \frac{5}{11}$
$\frac{3}{12} + \frac{1}{12} = \frac{4}{12}$	$\frac{5}{8} - \frac{3}{8} = \frac{2}{8}$
$\frac{5}{11} + \frac{4}{11} = \frac{9}{11}$	$\frac{11}{12} - \frac{5}{12} = \frac{6}{12}$

7 Loop buttons to show the fraction then write a number sentence to show your thinking.

$\frac{1}{3}$ of 21 is **7** because

7 x 3 = 21

$\frac{4}{5}$ of 15 is **12** because

3 x 4 = 12

8 Complete the parts to match.

= $\frac{2}{5}$ = $\frac{40}{100}$ = 0. **4**

MONEY & FINANCIAL MATHEMATICS

9 How much is left in the wallet after the purchase?

$46.40

3 of these **$5.60** + 4 of these **$6.35** = $ **4.20**

10 Calculate the cost of a single item.

4 for $8.60	6 for $13.80
$ **2.15**	$ **2.30**
5 for $9.75	3 for $8.55
$ **1.95**	$ **2.85**

PATTERNS & ALGEBRA

11 Complete these division patterns.

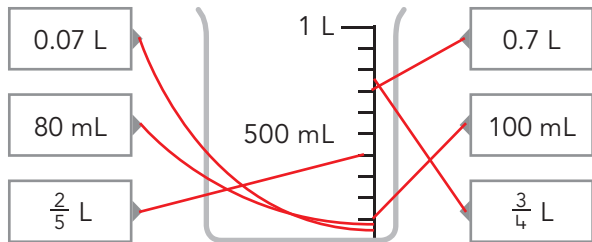| 2400 ÷ 3 = **800** | 3600 ÷ 4 = **900** |
| 2400 ÷ 30 = **80** | 3600 ÷ 40 = **90** |
| 2400 ÷ 300 = **8** | 3600 ÷ 400 = **9** |

NUMBER & ALGEBRA

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

12 Show the different ways to write these quantities.

Whole number	Common fraction	Decimal fraction
300 mL	$\frac{3}{10}$ L	**0.3** L
50 mL	$\frac{1}{20}$ L	**0.05** L
1500 mL	$1\frac{1}{2}$ L	1.5 L

13 Draw lines to show each amount on the scale.

0.07 L   1 L   0.7 L

80 mL   500 mL   100 mL

$\frac{2}{5}$ L $\frac{3}{4}$ L

14 Calculate the perimeter and area of this oblong.

7 cm
6 cm

Perimeter = **26** cm

Area = **42** cm²
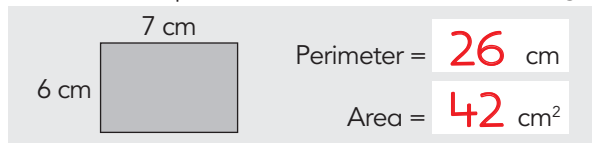
15 Match these 12-hour and 24-hour times.

6:20 a.m.	7:50 p.m.	6:50 p.m.	10:20 a.m.

18:50	19:50	06:20	10:20
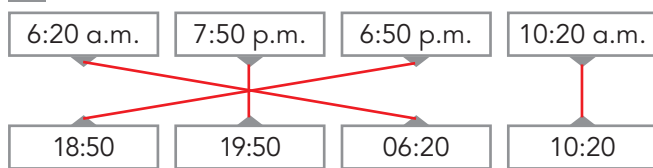
16 This polygon has equal length sides. Use the perimeter to work out the length of one side.

Perimeter = 60 cm

Length of one side = **10** cm
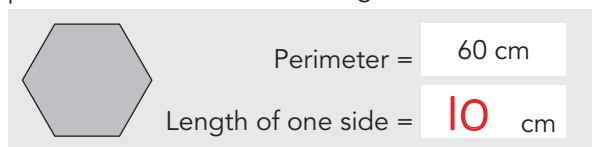
SHAPE

17 Draw a net for a rectangular-based prism. *
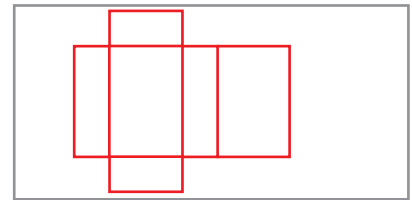
18 Complete these triangles.

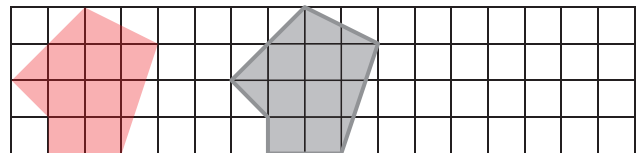Equilateral   Scalene *   Isosceles *
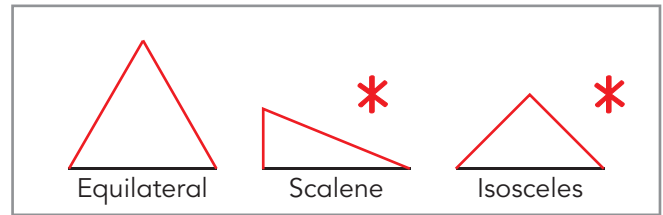
19 Use arrow symbols to mark each pair of parallel lines.
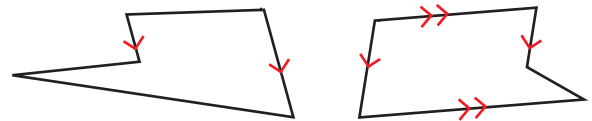
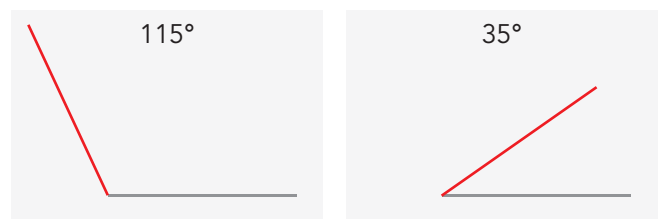### LOCATION & TRANSFORMATION

20 Slide this shape 6 squares left.

GEOMETRIC REASONING

21 Use a protractor to draw these angles.

115°   35°

STATISTICS & PROBABILITY

CHANCE

22 **a.** Draw these coloured counters on scrap paper. Close your eyes and randomly select a paper counter. Repeat this 24 times. *

Use tallies to record your results.

Red	Black	Yellow

b. Create a pie chart to show the results.

Title: