NAME _____

STEP IT UP! 9

MENTAL MATHS

ADDITION & SUBTRACTION

16 + 23 = 39	37 + 37 = 74	42 – 9 = 33
19 + 13 = 32	14 + 14 = 28	63 – 8 = 55
18 + 15 = 33	26 + 26 = 52	55 – 7 = 48
17 + 16 = 33	40 + 40 = 80	37 – 6 = 31
10 + 14 = 24	21 + 21 = 42	23 – 5 = 18

MULTIPLICATION & DIVISION

10 × 5 = 50	10 × 15 = 150	12 ÷ 2 = 6
10 × 2 = 20	10 × 20 = 200	8 ÷ 2 = 4
10 × 1 = 10	12 × 10 = 120	20 ÷ 2 = 10
10 × 9 = 90	10 × 10 = 100	16 ÷ 2 = 8
10 × 3 = 30	10 × 17 = 170	4 ÷ 2 = 2

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Subtract 210 from each number.

67 342	67 132	48 196	47 986
71 824	71 614	12 894	12 684
18 562	18 352	37 203	36 993
40 690	40 480	56 110	55 900
83 916	83 706	62 106	61 896

2 Use a written method to calculate the total mass.

Fruit	47 kg	Nuts	29 kg
Pasta	26 kg	Rice	46 kg
Meat	14 kg	Vegetables	25 kg

Fruit and Meat 47 +14 61 kg	Nuts and Rice 29 +46 75 kg
Vegetables and Meat 25 +14 39 kg	Fruit and Pasta 47 +26 73 kg
Rice and Pasta 46 +26 72 kg	Nuts and Vegetables 29 +25 54 kg

MONEY & FINANCIAL MATHEMATICS

3 Work out the total cost.

- $19.95, $6.75: $19.95 + $6 = $25.95; $25.95 + 5c + 70c = $26.70
- $13.85, $14.65: $13.85 + $14 = $27.85; $27.85 + 15c + 50c = $28.50
- $12.55, $17.05: $12.55 + $17 = $29.55; $29.55 + 5c = $29.60
- $34.75, $6.75: $34.75 + $6 = $40.75; $40.75 + 25c + 50c = $41.50

PATTERNS & ALGEBRA

4 Write the unknown amounts.

You can **count on** to work out the total cost. For example, when you *see* $16.15 + $13.95 *think* $16.15 + 85c + $13.10 or $16.15 + $13 + 95c.

✱ Answers will vary. This is one example.

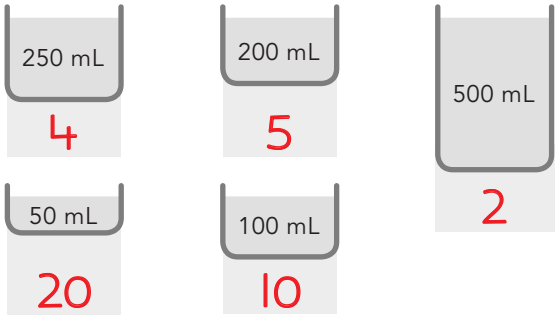
MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

5 Convert these measurements.

1 km	1000 m	$\frac{1}{4}$ km	250 m
$\frac{1}{2}$ km	500 m	2500 m	2.5 km
8000 m	8 km	1250 m	1.25 km
$3\frac{3}{4}$ km	3750 m	$5\frac{1}{4}$ km	5250 m

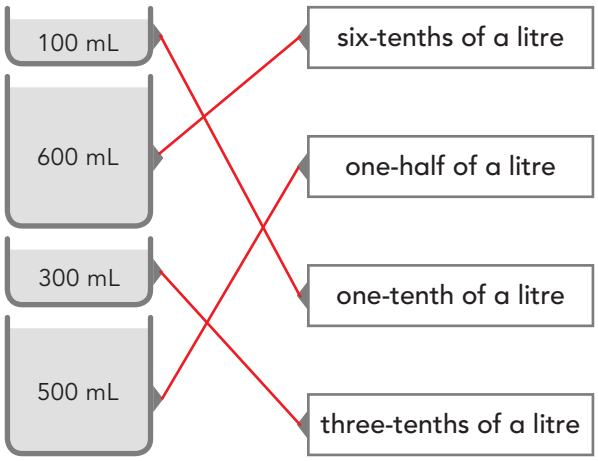
6 **a.** Write the number of each container needed to make 1 litre.



b. Write the amounts needed to make 2 litres.

1000 mL + 250 mL + 750 mL	= 2L
500 mL + 250 mL + 200 mL + 1050 mL	= 2L
250 mL + 100 mL + 1650 mL	= 2L

7 Draw lines to match these.



LOCATION & TRANSFORMATION

8

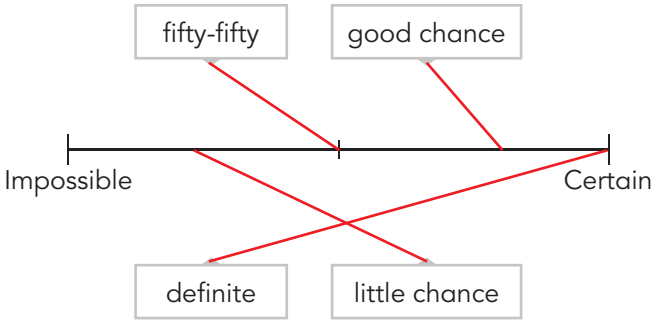
		X						2
	M			10		T	2	
						W		
		5				H		
					S			

- Start at W. Move up 1. Draw a T.
- Start at 2. Move down 1, left 1. Draw a 2.
- Start at 5. Move right 4. Draw an H.
- Start at 10. Move up 1, left 2. Draw an X.

STATISTICS & PROBABILITY

CHANCE

9 Draw a line to connect each label to the matching position on the line segment.



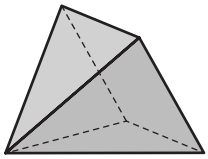
10 ✱ Write how you would describe the chance of you doing each activity this year.

a.	Going to a theme park	good chance
b.	Flying to the moon	impossible
c.	Riding a horse	unlikely
d.	Eating cake	definite
e.	Patting a zebra	little chance

TESTER

What is the name of this object?

- ◯ triangular-based prism
- ◯ triangular-based pyramid
- ● square-based pyramid
- ◯ cube



Colour one bubble.

PARENT/CARER SIGNATURE _____ DATE _____

NAME _____

STEP IT UP! 10

MENTAL MATHS

ADDITION & SUBTRACTION

55 + 10 = 65	35 + 22 = 57	69 – 12 = 57
67 + 12 = 79	35 + 34 = 69	74 – 22 = 52
84 + 21 = 105	42 + 41 = 83	86 – 21 = 65
73 + 22 = 95	33 + 33 = 66	93 – 11 = 82
49 + 11 = 60	62 + 62 = 124	55 – 10 = 45

MULTIPLICATION & DIVISION

6 × 2 = 12	30 ÷ 3 = 10	33 ÷ 3 = 11
2 × 2 = 4	6 ÷ 3 = 2	60 ÷ 3 = 20
3 × 2 = 6	12 ÷ 3 = 4	45 ÷ 3 = 15
4 × 2 = 8	18 ÷ 3 = 6	75 ÷ 3 = 25
2 × 8 = 16	27 ÷ 3 = 9	36 ÷ 3 = 12

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Complete these addition algorithms.

349 + 157 = 506	618 + 277 = 895	352 + 369 = 721
438 + 198 = 636	759 + 162 = 921	328 + 474 = 802
269 + 387 = 656	549 + 328 = 877	681 + 274 = 955

2 Work out the difference. Record the steps you use.

$331

331
−200
131
−70
61

$278

61
−8
53

$ 53

$176

469
−100
369
−70
299

$469

299
−6
293

$ 293

$681

681
−300
381
−90
291

$394

291
−4
287

$ 287

$522

522
−200
322
−40
282

$246

282
−6
276

$ 276

FRACTIONS & DECIMALS

3 Use all these digits. Write these numbers.

3	8	1

- The greatest number possible: 8 3 . 1
- The least number possible: 1 3 . 8
- A number as close as possible to 20: 1 8 . 3

4 Look at the table.

Junior Athletics – Javelin	
Athlete	Distance (m)
Seth	55.35
James	68.19
Clare	59.47
Thomas	63.95
Cassie	60.28

Write the 5 throws in order from longest to shortest.

68.19 63.95 60.28 59.47 55.35

MONEY & FINANCIAL MATHEMATICS

5 Calculate the change from $50.

$4.45 **$6.95**

$4.45 + $6.95 = $11.40
$50 – $11.40 = Change = $38.60

$11.05 **$24.85**

$11.05 + $24.85 = $35.90
$50 – $35.90 = Change = $ 14.10

$4.15 **$17.90**

$4.15 + $17.90 = $22.05
$50 – $22.05 = Change = $ 27.95

i You can use a **count-on strategy** to calculate change. For example, when you see $20 – $5.95 think $5.95 + 5c is $6 and $6 + $14 is $20. The change is $14.05.

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

6 Convert these measurements.

1200 mL	1.2 L	2.9 L	2900 mL
0.7 L	700 mL	300 mL	0.3 L
1400 mL	1.4 L	1.65 L	1650 mL
$\frac{1}{2}$ L	500 mL	750 mL	0.75 L

7 Work out the capacity of each container.

A + A + B = 2.8 L

A + C + B = 2.5 L

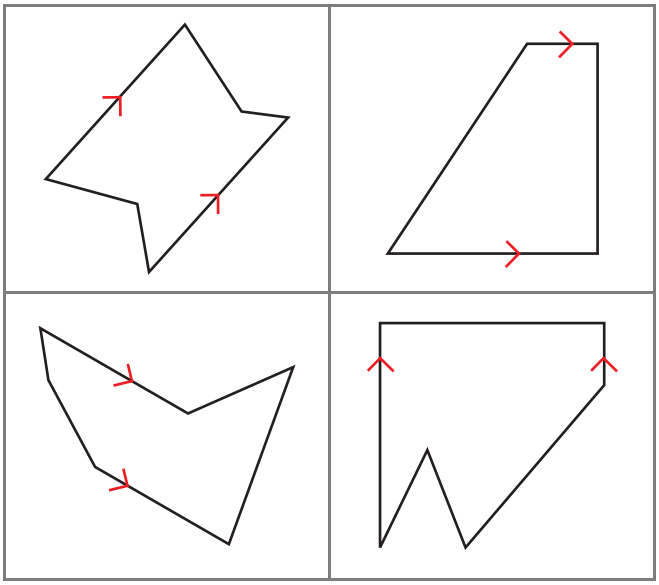
B + B = 3.2 L

A = 0.6 L C = 0.3 L

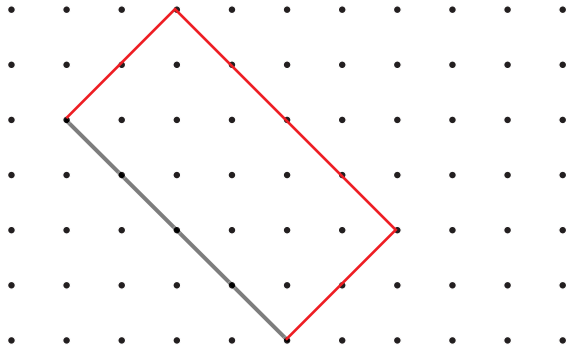
B = 1.6 L

SHAPE

8 Mark the pairs of parallel lines in each shape.



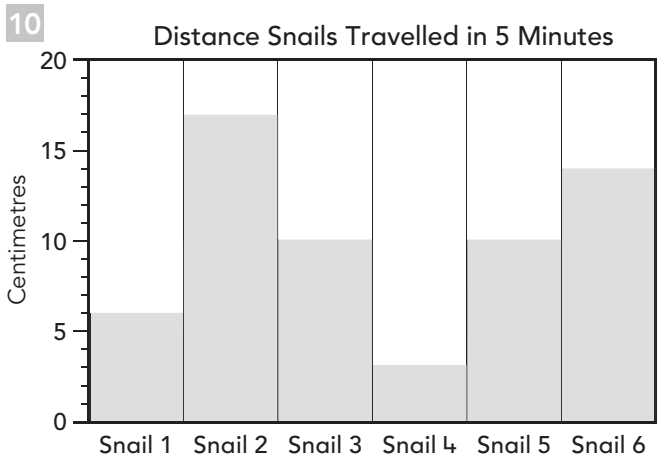
9 Draw 3 more sides to complete an oblong. ✱



STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

10



a. Which two snails travelled the same distance? 3 and 5

b. What was the difference between the shortest and the longest distances? 14 cm

c. How much further did Snail 6 travel than Snail 4? 10 cm

d. Which snail recorded the second shortest distance? 1

e. How far did that snail travel? 6 cm

f. What is the total distance for all the snails? 61 cm

TESTER

Imagine these number patterns were continued.
Which number pattern will **not** use the number 48?

- ○ 2, 4, 6, 8, 10, 12
- ○ 3, 6, 9, 12, 15, 18
- ○ 4, 8, 12, 16, 20, 24
- ● 5, 10, 15, 20, 25, 30

Colour one bubble.

PARENT/CARER SIGNATURE _____ DATE _____

NAME _____

STEP IT UP! 11

MENTAL MATHS

ADDITION & SUBTRACTION

72 + 18 = 90	42 + 42 = 84	79 – 19 = 60
63 + 17 = 80	33 + 33 = 66	69 – 19 = 50
46 + 14 = 60	21 + 21 = 42	29 – 19 = 10
57 + 13 = 70	11 + 11 = 22	49 – 19 = 30
29 + 11 = 40	41 + 41 = 82	39 – 19 = 20

MULTIPLICATION & DIVISION

4 × 3 = 12	16 ÷ 4 = 4	80 ÷ 4 = 20
10 × 3 = 30	32 ÷ 4 = 8	48 ÷ 4 = 12
3 × 7 = 21	40 ÷ 4 = 10	100 ÷ 4 = 25
3 × 9 = 27	4 ÷ 4 = 1	200 ÷ 4 = 50
3 × 2 = 6	12 ÷ 4 = 3	160 ÷ 4 = 40

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Complete the missing numbers.

11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

a. Cross out the numbers that have 2 as a factor.

b. Loop the numbers that have 3 as a factor.

c. Colour yellow the numbers that have 9 as a factor.

d. Colour blue the numbers that have 5 as a factor.

e. List the next 4 numbers after 41 that have:

- 2 as a factor → 42, 44, 46, 48
- 3 as a factor → 42, 45, 48, 51
- 9 as a factor → 45, 54, 63, 72
- 5 as a factor → 45, 50, 55, 60

2 Break each number into 2 parts that are easy to divide.

Divide by 4.

64 → 40 + 24

52 → 40 + 12

Divide by 3.

76 → 30 + 46

84 → 30 + 54

Divide by 6.

78 → 60 + 18

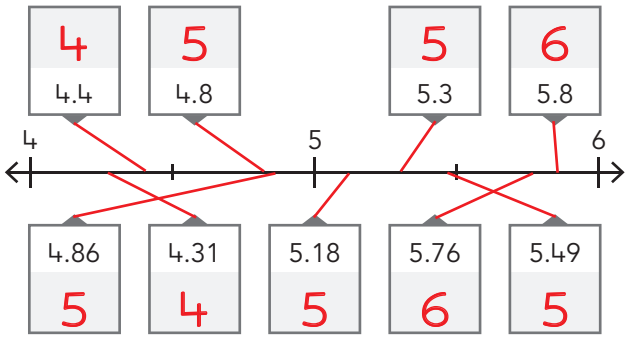
90 → 60 + 30

3 Break each number into parts to make the division easier. Write the answer.

65 ÷ 5 = 13 is the same as 60 ÷ 5 plus 5 ÷ 5	91 ÷ 7 = 13 is the same as 84 ÷ 7 plus 7 ÷ 7
68 ÷ 4 = 17 is the same as 60 ÷ 4 plus 8 ÷ 4	51 ÷ 3 = 17 is the same as 48 ÷ 3 plus 3 ÷ 3
246 ÷ 3 = 82 is the same as 240 ÷ 3 plus 6 ÷ 3	368 ÷ 4 = 92 is the same as 360 ÷ 4 plus 8 ÷ 4

FRACTIONS & DECIMALS

4 Match each decimal to the number line then write the whole number that is closest.



You can **split the dividend** to make a division problem easier. For example, when you *see* 76 ÷ 4 *think* 76 is the same as 40 + 36, so 40 ÷ 4 is 10 and 36 ÷ 4 is 9. The answer is 19.

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

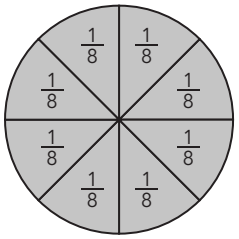
USING UNITS OF MEASUREMENT

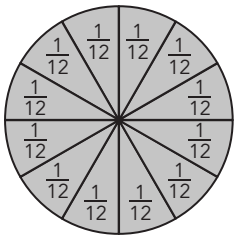
5 Convert these measures.

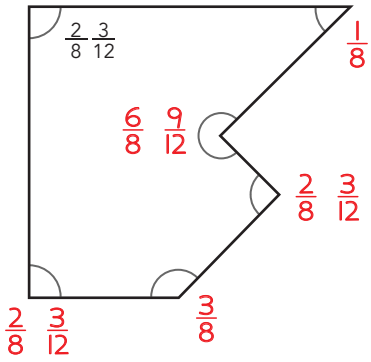
1600 mL	1.6 L	750 mL	0.75 L
2.3 L	2300 mL	1.055 L	1055 mL

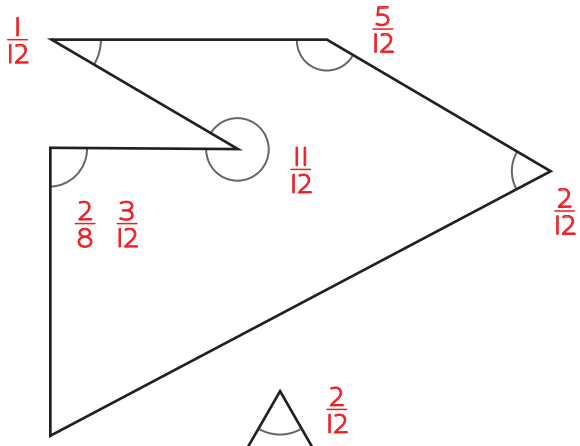
GEOMETRIC REASONING

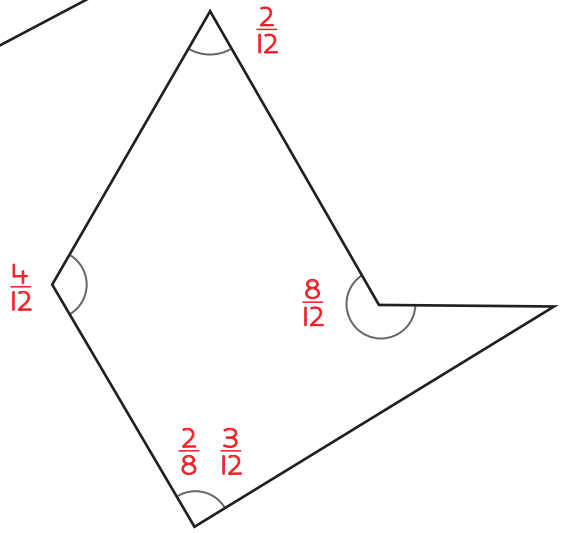
6 Trace and use these angle testers to measure the marked internal angles in each shape.











STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

7 This table shows the number of catches out of 7 by students.

Number of catches	0	1	2	3	4	5	6	7
Tally		II	III	III	IIII	IIII	IIII III	III
Total	0	2	3	3	5	5	8	3

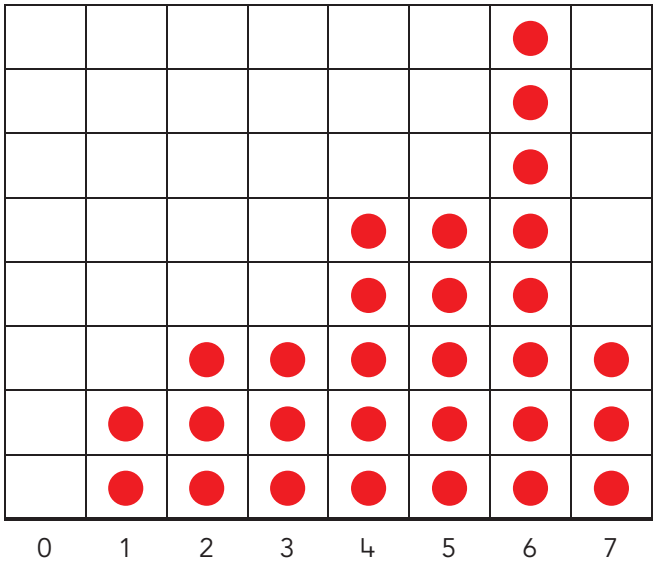
a. Write the totals in the table.

b. Complete the dot plot to show the data.

c. How many students caught fewer than 4 balls? 8

d. How many students caught 4 or more balls? 21

e. How many students caught at least 1 ball? 29



Title: Catches made out of seven

TESTER

Imagine you buy these 2 books.
How much change will you receive from $50?

Change = $7.55

Write your answer in the box.

PARENT/CARER SIGNATURE _____ DATE _____

NAME _____

STEP IT UP! 12

MENTAL MATHS

ADDITION & SUBTRACTION

5 + 12 = 17	14 + 16 = 30	30 – 13 = 17
6 + 13 = 19	8 + 15 = 23	40 – 18 = 22
16 + 10 = 26	11 + 15 = 26	20 – 8 = 12
13 + 11 = 24	9 + 19 = 28	50 – 11 = 39
17 + 6 = 23	15 + 15 = 30	80 – 14 = 66

MULTIPLICATION & DIVISION

2 × 4 = 8	15 ÷ 5 = 3	65 ÷ 5 = 13
4 × 9 = 36	45 ÷ 5 = 9	70 ÷ 5 = 14
5 × 4 = 20	25 ÷ 5 = 5	100 ÷ 5 = 20
4 × 10 = 40	35 ÷ 5 = 7	60 ÷ 5 = 12
8 × 4 = 32	10 ÷ 5 = 2	55 ÷ 5 = 11

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write the next 4 multiples.

2 is a factor → 2, 4, 6, 8, 10, 12, 14

3 is a factor → 3, 6, 9, 12, 15, 18, 21

4 is a factor → 4, 8, 12, 16, 20, 24, 28

5 is a factor → 5, 10, 15, 20, 25, 30, 35

6 is a factor → 6, 12, 18, 24, 30, 36, 42

7 is a factor → 7, 14, 21, 28, 35, 42, 49

8 is a factor → 8, 16, 24, 32, 40, 48, 56

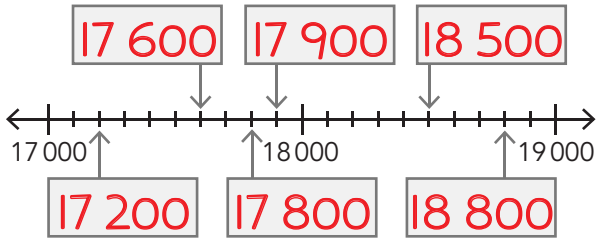
9 is a factor → 9, 18, 27, 36, 45, 54, 63

2 Break each number into parts to make the division easier. Write the answers.

276 ÷ 3 = 92 is the same as 240 ÷ 3 plus 36 ÷ 3	426 ÷ 6 = 71 is the same as 420 ÷ 6 plus 6 ÷ 6
228 ÷ 3 = 76 is the same as 210 ÷ 3 plus 18 ÷ 3	256 ÷ 4 = 64 is the same as 240 ÷ 4 plus 16 ÷ 4
375 ÷ 5 = 75 is the same as 350 ÷ 5 plus 25 ÷ 5	424 ÷ 8 = 53 is the same as 400 ÷ 8 plus 24 ÷ 8

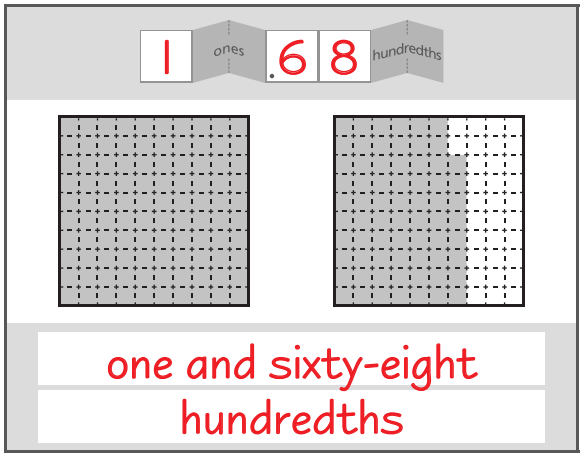
$12.40 ÷ 4 = $3.10 is the same as $12 ÷ 4 plus 40c ÷ 4	$35.25 ÷ 5 = $7.05 is the same as $35 ÷ 5 plus 25c ÷ 5
$48.54 ÷ 6 = $8.09 is the same as $48 ÷ 6 plus 54c ÷ 6	$42.35 ÷ 7 = $6.05 is the same as $42 ÷ 7 plus 35c ÷ 7

3 Write the number in each box.



FRACTIONS & DECIMALS

4 Each grid represents one whole.
Write the shaded amount on the expander.
Then write the decimal in words.



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.

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

5 Complete the timetable to match these times.

- Trains depart Rington every 18 minutes.
- The train to Mawly takes 9 minutes.
- The train from Mawly to Teetown takes 5 minutes.

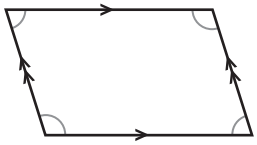
Trains from Rington to Teetown					
Rington	12:23	12:41	12:59	1:17	1:35
Mawly	12:32	12:50	1:08	1:26	1:44
Teetown	12:37	12:55	1:13	1:31	1:49

6 Look at the timetable above. Imagine all the trains were running exactly 15 minutes late. Complete this table to show the new train times.

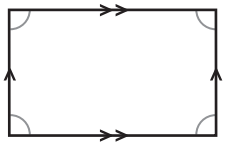
Trains from Rington to Teetown					
Rington	12:38	12:56	1:14	1:32	1:50
Mawly	12:47	1:05	1:23	1:41	1:59
Teetown	12:52	1:10	1:28	1:46	2:04

GEOMETRIC REASONING

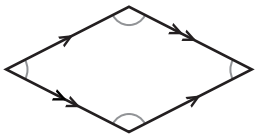
7 Compare the angles in each parallelogram (trace the angles if necessary). Write what you notice.



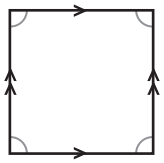
the obtuse and acute angles are opposite and equal to each other



all are right angles



the obtuse and acute angles are opposite and equal to each other

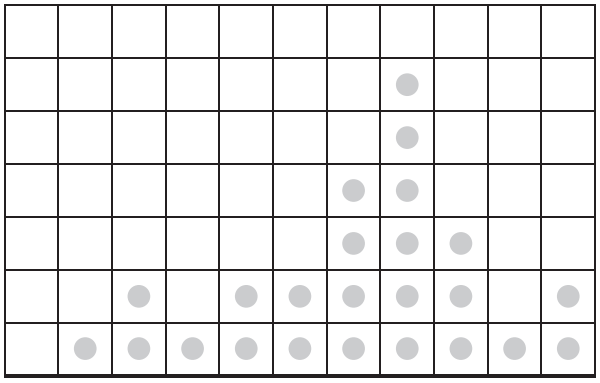


all are right angles

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

8 Look at this dot plot.



Spelling Test Scores out of 10

a. How many students sat the test? 24

b. How many students had 6 or more correct words? 16

c. How many students had fewer than 6 correct words? 8

d. How many students had all 10 words correct? 2

✱ **e.** If the students practised their spelling words every night, do you think these results would change? Explain.

Probably. If they practice more, their test scores could be even higher.

TESTER

Imagine one marble is taken out of this bag without looking. Which statement is **not** true?

- ◯ Green is less likely than blue.
- ◯ Black is impossible.
- ◯ Red is more likely than blue.
- ● Green is less likely than yellow.

Colour one bubble.

PARENT/CARER SIGNATURE _____ DATE _____

NAME _____

MENTAL MATHS

ADDITION & SUBTRACTION

28 + 28 = 56	15 + 16 = 31	60 − 12 = 48
33 + 33 = 66	13 + 14 = 27	63 − 21 = 42
46 + 46 = 92	19 + 18 = 37	61 − 23 = 38
19 + 19 = 38	16 + 17 = 33	65 − 11 = 54
37 + 37 = 74	14 + 15 = 29	62 − 15 = 47

MULTIPLICATION & DIVISION

5 × 2 = 10	18 ÷ 6 = 3	6 ÷ 1 = 6
5 × 9 = 45	42 ÷ 6 = 7	60 ÷ 10 = 6
5 × 8 = 40	54 ÷ 9 = 6	600 ÷ 100 = 6
5 × 5 = 25	66 ÷ 6 = 11	72 ÷ 6 = 12
5 × 6 = 30	36 ÷ 6 = 6	30 ÷ 6 = 5

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Using base-10 blocks, write what a millions block could be traded for.

1 000 000 ones =	1 000 000
100 000 tens =	1 000 000
10 000 hundreds =	1 000 000
1000 thousands =	1 000 000
100 ten thousands =	1 000 000
10 hundred thousands =	1 000 000

2 Write the value of the red digit in words.

1	2	6	millions	4	1	9	thousands	6	2	3	ones

twenty millions

3 **a.** Write how you would read this number.

2	millions	5	6	3	thousands	9	2	4	ones

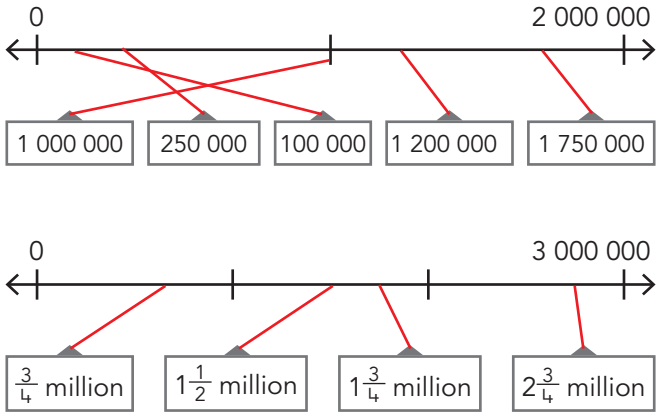
2 million, 5 hundred and 63 thousand, 9 hundred and 24

b. Write this number on the expander.

Five hundred and ten million, three hundred and sixteen thousand, two hundred and fifteen

5	1	0	millions	3	1	6	thousands	2	1	5	ones

4 Draw a line from each number to its position.



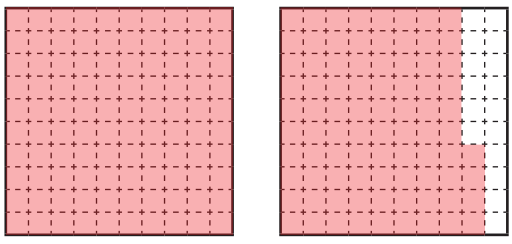
5 Write each fraction in numbers.

$\frac{3}{4}$ million = 750 000 $2\frac{3}{4}$ million = 2 750 000

FRACTIONS & DECIMALS

6 Each grid represents one whole.
Shade the grids to show the decimal.
Then write the decimal in words.

1	ones	8	4	hundredths



one and eighty-four hundredths

In our number system, **places are grouped in threes**. In each group, there are hundreds, tens and ones of the particular amount.

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

7 How many 75 gram bags could be filled from these amounts?

150 g = 2	1.5 kg = 20
$\frac{3}{4}$ kg = 10	600 g = 8

8 How many 250 gram bags could be filled from these amounts?

$\frac{1}{2}$ kg = 2	1 kg = 4
$\frac{3}{4}$ kg = 3	1.5 g = 6

9 How many 50 gram bags could be filled from these amounts?

$\frac{1}{2}$ kg = 10	1 kg = 20
$\frac{1}{4}$ kg = 5	$1\frac{3}{4}$ kg = 35

10 Convert these masses.

1 kg → 1000 g	$\frac{1}{2}$ kg → 500 g
$\frac{1}{4}$ kg → 250 g	$\frac{3}{4}$ kg → 750 g

11 Write each of these amounts in litres.

1400 mL → 1.4 L	2100 mL → 2.1 L
700 mL → 0.7 L	1900 mL → 1.9 L
270 mL → 0.27 L	2120 mL → 2.12 L

GEOMETRIC REASONING

12 Draw and mark these angles.

✱

obtuse angle

right angle

13 Draw a quadrilateral that has 2 acute angles.

✱

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

14 **a.** A class estimated the number of jelly beans in a jar. Complete the dot plot to show these results.

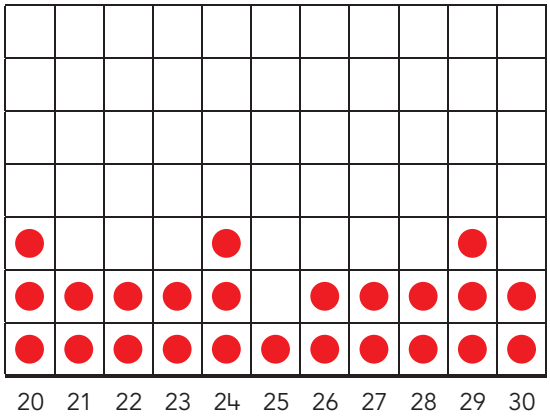
22	29	30	24	21	20	27	26	25	20	29	28
23	27	23	26	20	21	30	28	24	22	29	

b. A new student estimated 24.
Draw a dot to show this number.

c. The number of jelly beans in the jar was 25.
How many students estimated the exact amount? 1

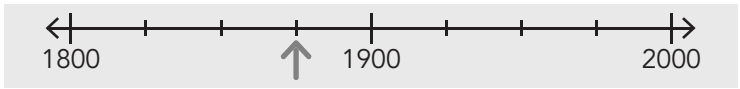
d. How many students estimated fewer than 25? 12

e. How many students estimated more than 25? 11



TESTER

Which year is the arrow pointing to on this timeline?



○ 1925 ○ 1890 ○ 1850 ● 1875

Colour one bubble.

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NAME _____

STEP IT UP! 14

MENTAL MATHS

ADDITION & SUBTRACTION

17 + 8 = 25	18 + 22 = 40	36 – 23 = 13
49 + 5 = 54	46 + 46 = 92	31 – 15 = 16
33 + 9 = 42	18 + 37 = 55	42 – 20 = 22
65 + 6 = 71	19 + 28 = 47	59 – 44 = 15
77 + 4 = 81	35 + 64 = 99	63 – 26 = 37

MULTIPLICATION & DIVISION

5 × 6 = 30	77 ÷ 7 = 11	63 ÷ 7 = 9
7 × 6 = 42	21 ÷ 7 = 3	28 ÷ 7 = 4
10 × 6 = 60	35 ÷ 7 = 5	49 ÷ 7 = 7
6 × 9 = 54	42 ÷ 7 = 6	700 ÷ 100 = 7
3 × 6 = 18	70 ÷ 7 = 10	56 ÷ 7 = 8

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write the missing parts of each puzzle.

460 709 358

millions			thousands			ones		
4	6	0	7	0	9	3	5	8

four hundred and sixty million, seven hundred and nine thousand, three hundred and fifty-eight

72 365 206

millions			thousands			ones		
	7	2	3	6	5	2	0	6

Seventy-two million, three hundred and sixty-five thousand, two hundred and six.

316 508 749

millions			thousands			ones		
3	1	6	5	0	8	7	4	9

three hundred and sixteen million, five hundred and eight thousand, seven hundred and forty-nine

MONEY & FINANCIAL MATHEMATICS

2 Work out the change from $100.

- $49.65
- $14.95

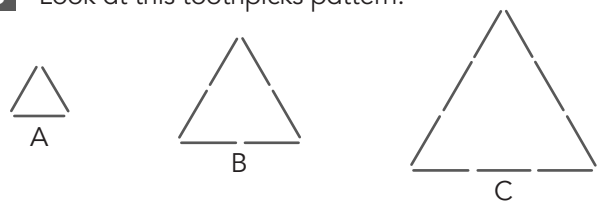
$49.65 + $14 = $63.65
$63.65 + 35c + 60c = $64.60
$100 – $64 – 60c
Change = $35.40

- $63.98
- $25.35

$63.98 + $25 = $88.98
$88.98 + 2c + 33c = $89.33
$100 – $89 – 33c
Change = $ 10.67

PATTERNS & ALGEBRA

3 Look at this toothpicks pattern.



a. Complete this table for the number of toothpicks.

Shape	A	B	C	D	E	F	G	H
Length of base	1	2	3	4	5	6	7	8
Total toothpicks	3	6	9	12	15	18	21	24

b. Write a rule for working out the total number of toothpicks when you know the length of the base.

Length of base x number of sides

c. Write the total amount of toothpicks needed when the base is:

10 toothpicks long	30
25 toothpicks long	75

d. How long is the base when the total number of toothpicks used is:

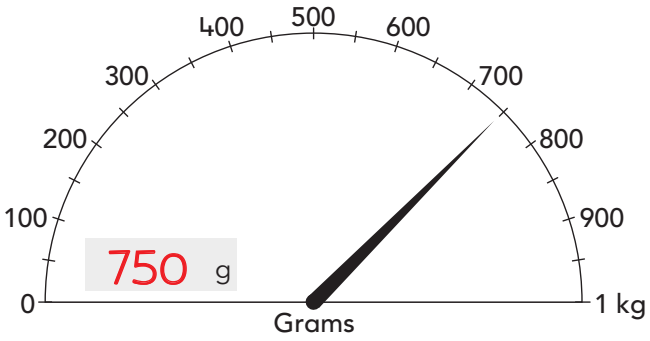
90 toothpicks long	30
135 toothpicks long	45

i You can use a **count-on strategy** to calculate change.
Start with the total price and count on to the amount tendered.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

4 **a.** Read this scale and write the mass.



b. Complete this sentence for the mass above.

750 g is the same as $\frac{3}{4}$ kg

5 Write the mass for the number items.

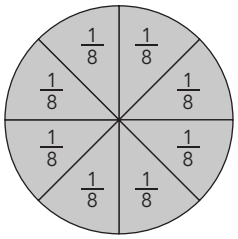
	Jar of coffee 250 g				
Number of jars	2	3	4	6	10
Total mass	500 g	750 g	1 kg	1.5 kg	2.5 kg

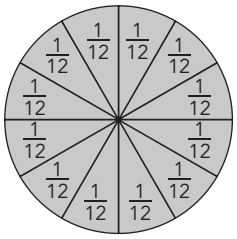
	Packet of lollies 125 g				
Number of packets	2	3	4	6	10
Total mass	250 g	375 g	500 g	750 g	1.25 kg

	Muesli bar 50 g				
Number of bars	2	3	4	6	10
Total mass	100 g	150 g	200 g	300 g	500 g

GEOMETRIC REASONING

6



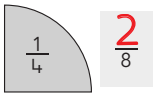


a.

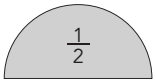
One part of this angle tester is $\frac{1}{8}$ of a full turn.

One part of this angle tester is $\frac{1}{12}$ of a full turn.

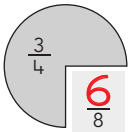
b. Write the number of eighths equivalent to these.



$\frac{2}{8}$

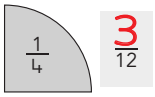


$\frac{4}{8}$

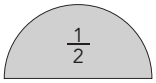


$\frac{6}{8}$

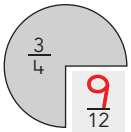
c. Write the number of twelfths equivalent to these.



$\frac{3}{12}$



$\frac{6}{12}$



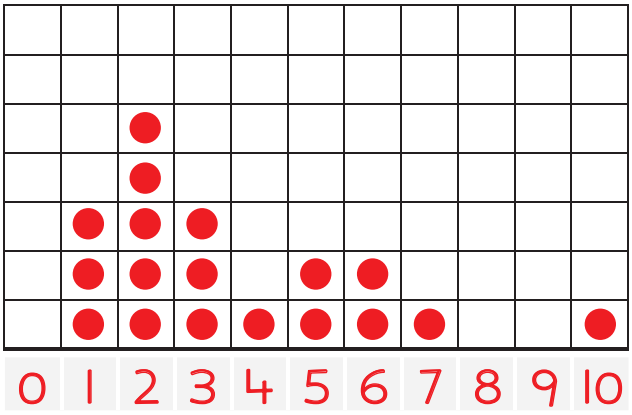
$\frac{9}{12}$

STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION

7 **a.** This data shows the number of hoops scored by each player at basketball. Show the data on the dot plot.

2	5	1	3	2	4	7	1	3
6	2	1	10	3	2	2	5	6



Title: Number of hoops we scored

b. How many players scored at least one hoop? 18

c. How many players scored fewer than 5 hoops? 12

d. How many scored 5 or more hoops? 6

TESTER

Four friends share 3 pizzas equally.
How much pizza will each person get?

$\frac{1}{2}$ ○ $\frac{3}{4}$ ● $\frac{1}{12}$ ○ $1\frac{1}{4}$ ○

Colour one bubble.

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✱ Answers will vary. This is one example.

NAME _____

STEP IT UP! 15

MENTAL MATHS

ADDITION & SUBTRACTION

13 + 14 = 27	52 + 9 = 61	90 − 13 = 77
15 + 28 = 43	22 + 44 = 66	83 − 18 = 65
11 + 27 = 38	32 + 40 = 72	62 − 18 = 44
16 + 38 = 54	24 + 21 = 45	77 − 11 = 66
12 + 23 = 35	40 + 8 = 48	63 − 14 = 49

MULTIPLICATION & DIVISION

7 × 7 = 49	80 ÷ 8 = 10	64 ÷ 8 = 8
7 × 8 = 56	8 ÷ 8 = 1	160 ÷ 8 = 20
7 × 4 = 28	40 ÷ 8 = 5	96 ÷ 8 = 12
7 × 9 = 63	56 ÷ 8 = 7	88 ÷ 8 = 11
7 × 5 = 35	16 ÷ 8 = 2	400 ÷ 8 = 50

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write all the factors of each number.

24 is the same as		56 is the same as	
1	24	1	56
2	12	2	28
3	8	4	14
4	6	8	7

28 is the same as		18 is the same as	
1	28	1	18
2	14	2	9
4	7	3	6

34 is the same as		25 is the same as	
1	34	1	25
2	17	5	5

48 is the same as		35 is the same as	
1	48	1	35
2	24	5	7
3	16		
4	12		
6	8		

19 is the same as	
1	19

2 **a.** How many different factors does 25 have? 3

b. 25 is a special type of number. It is called a square number.

c. How many different factors does 19 have? 1

d. 19 is a special type of number. It is called a prime number.

3 Break one number into 2 factors to make the multiplication easier then write the answer.

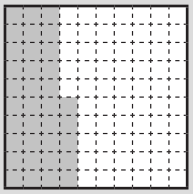
8 × 45 =	8	× 5 ×	9	=	360
35 × 4 =	5	× 7 ×	4	=	140
25 × 36 =	25	× 6 ×	6	=	900

4 Break both numbers into 2 factors then write the answer.

15 × 14 =	3	× 5 ×	7	× 2	=	210
25 × 18 =	5	× 5 ×	3	× 6	=	450
22 × 45 =	2	× 11 ×	5	× 9	=	990
35 × 16 =	5	× 7 ×	4	× 4	=	560

FRACTIONS & DECIMALS

5 Write the fraction that is shaded.



3 tenths and 5 hundredths **is the same as** 35 hundredths

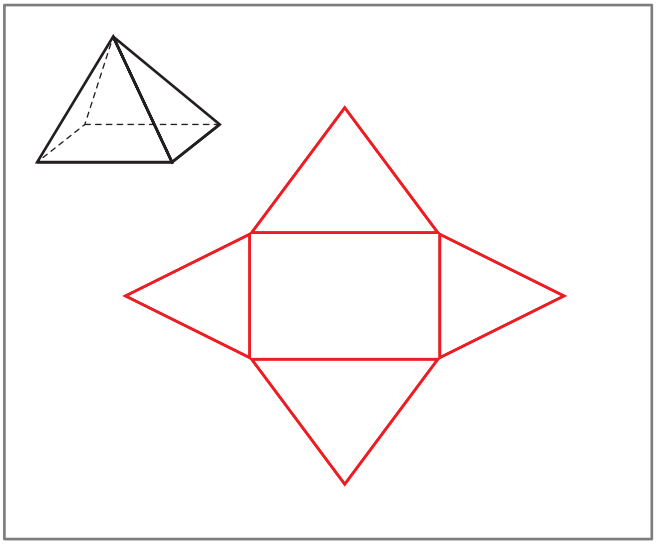
i You can **use factors** to make multiplication easier. For example, when you *see* 15 × 18 *think* 5 × 3 × 2 × 9 and multiply 5 × 2 first.

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

SHAPE

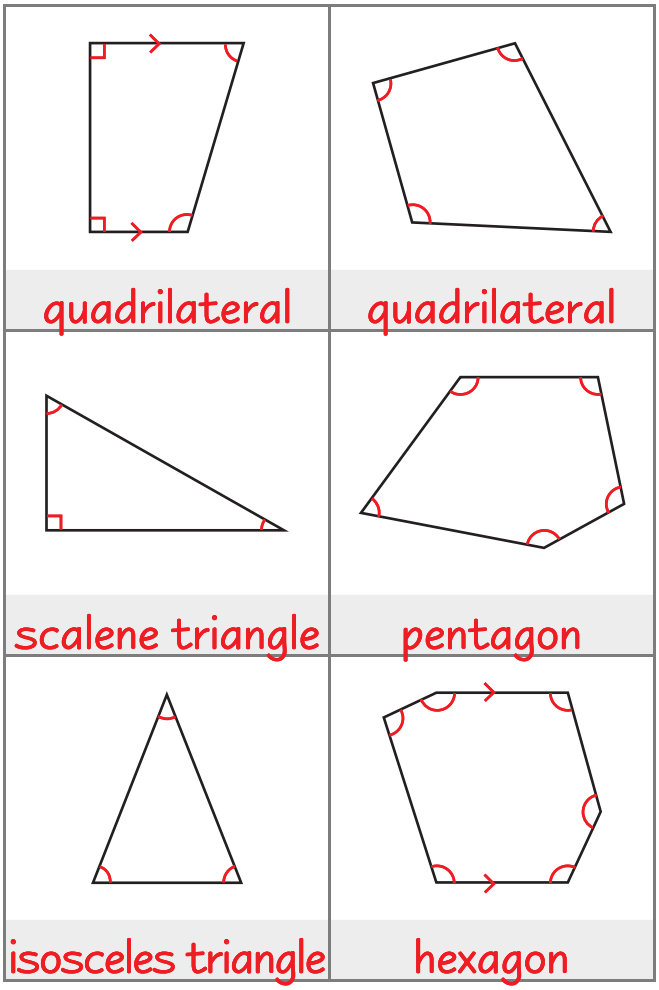
6 Draw a net for this pyramid. ✱



7 **a.** Use some of these names to label the 6 shapes on the right. Some names will not be used.

parallelogram	scalene triangle
isosceles triangle	quadrilateral
rectangle	pentagon
octagon	equilateral triangle
hexagon	square

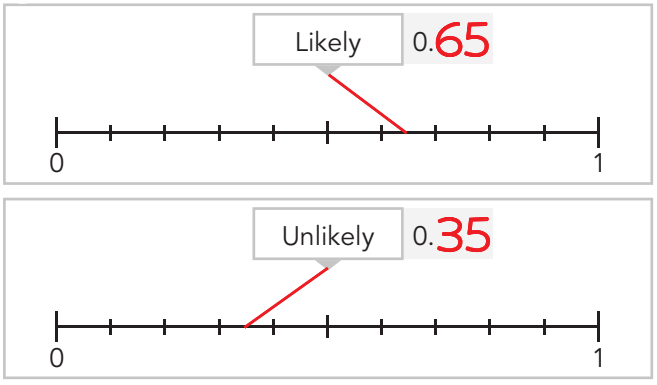
b. Label the angles and any parallel sides.

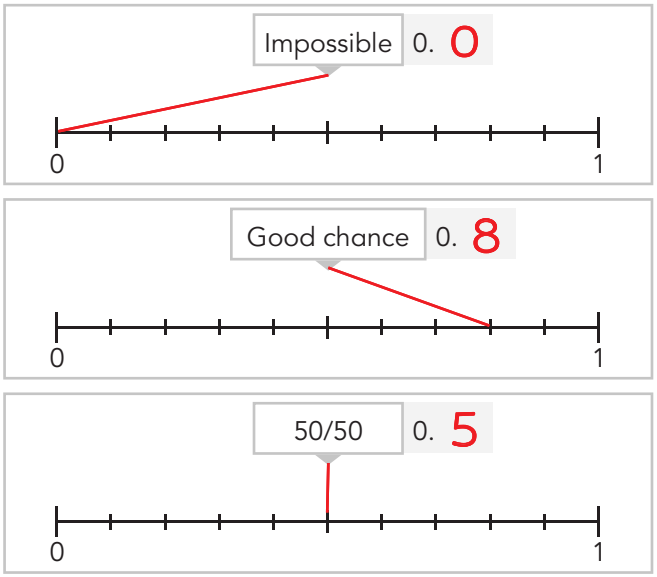


STATISTICS & PROBABILITY

CHANCE

8 Draw lines to show where each label best fits. ✱ Then write the decimal fraction to match.





TESTER

After a treasure hunt, Grace has 43 items and Rachel has 35 items.
How many items should Grace give to Rachel so they both have the same number?

Colour one bubble.

8 ○ 5 ○ 6 ○ 4 ●

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STEP IT UP! 16

MENTAL MATHS

ADDITION & SUBTRACTION

39 + 18 = 57	35 + 12 = 47	90 – 17 = 73
47 + 16 = 63	56 + 13 = 69	96 – 13 = 83
55 + 18 = 73	20 + 76 = 96	93 – 15 = 78
72 + 17 = 89	73 + 21 = 94	98 – 12 = 86
81 + 19 = 100	17 + 76 = 93	90 – 28 = 62

MULTIPLICATION & DIVISION

8 × 9 = 72	36 ÷ 9 = 4	180 ÷ 9 = 20
7 × 8 = 56	9 ÷ 9 = 1	99 ÷ 9 = 11
8 × 4 = 32	81 ÷ 9 = 9	900 ÷ 9 = 100
11 × 8 = 88	18 ÷ 9 = 2	135 ÷ 9 = 15
8 × 6 = 48	63 ÷ 9 = 7	108 ÷ 9 = 12

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 Write all the factors.

84 is the same as	126 is the same as
1 × 84	1 × 126
2 × 42	2 × 63
3 × 28	3 × 42
4 × 21	6 × 21
6 × 14	7 × 18
7 × 12	9 × 14

138 is the same as	152 is the same as
1 × 138	1 × 152
2 × 69	2 × 76
3 × 46	4 × 38
6 × 23	8 × 19

2 Draw ↷ to connect compatible pairs
Then write the total.

14 × 5 × 2 = 140
4 × 9 × 5 = 180
6 × 12 × 5 = 360
5 × 2 × 24 = 240
8 × 5 × 9 = 360
7 × 6 × 5 = 210

3 Multiply the easy parts first. Then write the answer.

8 × 3 × 5 × 3 = 40 × 9 = 360
6 × 4 × 25 × 7 = 100 × 42 = 4200
4 × 9 × 2 × 5 = 20 × 18 = 360
5 × 5 × 4 × 7 = 20 × 35 = 700
20 × 3 × 7 × 5 = 100 × 21 = 2100

4 Double one number and halve the other to make the multiplication easier. Then write the answer.

25 × 28 → 50 × 14 → 100 × 7
so 25 × 28 = 700

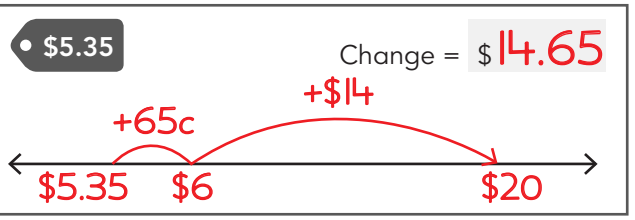
24 × 15 → 12 × 30 → 6 × 60
so 24 × 15 = 360

45 × 18 → 90 × 9
so 45 × 18 = 810

16 × 35 → 8 × 70
so 16 × 35 = 560

MONEY & FINANCIAL MATHEMATICS

5 Count on to find the change from $20.
Show your thinking on the number line.



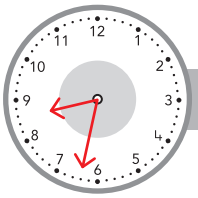
net is a flat model that can be folded to form a 3D object such as a pyramid or prism.

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

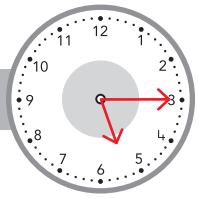
USING UNITS OF MEASUREMENT

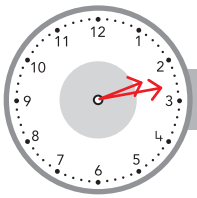
5 Show each time on the 2 clocks.



27 minutes to 9 — 8 : 33

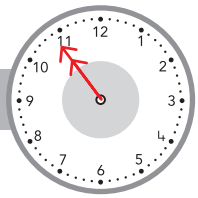
5 : 15 — a quarter past 5





13 minutes past 2 — 2 : 13

10 : 54 — 6 minutes to 11

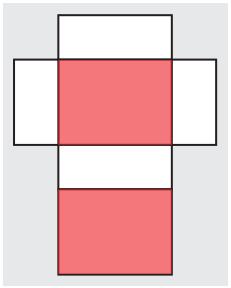


SHAPE

6 **a.** What object will this net make?

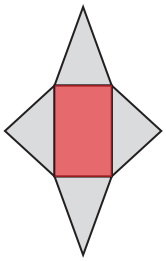
rectangular-based prism

b. Colour the parts of the net that will be the bases.



7 **a.** What object will this net make?

oblong-based pyramid



b. Colour the part of the net that will be the base.

8 Write the missing words.

a. A square-based pyramid is a 3D object with a square for a base.

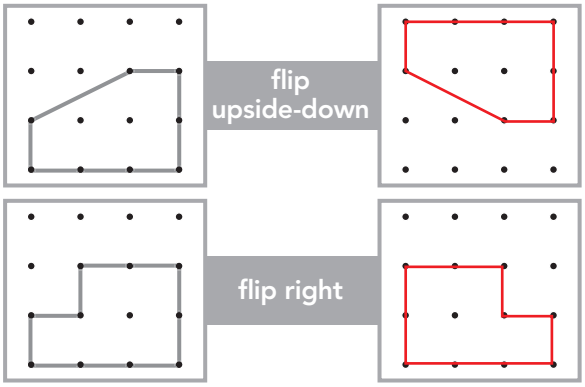
All the other faces are triangles.

b. A prism is a 3D object with 2 parallel bases the same size.

✱ The other faces are usually all rectangles.

LOCATION & TRANSFORMATION

9 Draw each shape after the move.

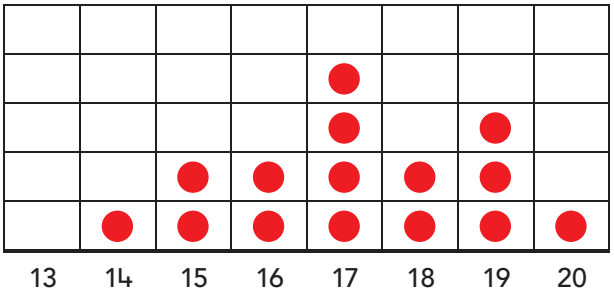


STATISTICS & PROBABILITY

DATA REPRESENTATION & INTERPRETATION ✱

10 Complete the dot plot to match this data.

- 15 students ran in the race.
- No students ran the race in 13 seconds.
- Most students ran the race in 17 seconds or more.
- Some students ran the race in less than 17 seconds.



Title: Our Race Times

TESTER

This bag contains only red or yellow marbles.
What fraction of the marbles are yellow?

$\frac{5}{3}$ ○ $\frac{5}{8}$ ○ $\frac{3}{8}$ ● $\frac{3}{5}$ ○

Colour one bubble.

PARENT/CARER SIGNATURE _____ DATE _____

NAME _____

STEP IT UP! REVIEW 2

NUMBER & ALGEBRA

NUMBER & PLACE VALUE

1 **a.** Loop the numbers that have 2 as a factor.
b. Cross out the numbers that have 5 as a factor.
c. Colour green the numbers that have 3 as a factor.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

2 Break each number into 2 parts to divide.

81	72	48
60 + 21	60 + 12	30 + 18
81 ÷ 3 = 27	72 ÷ 3 = 24	48 ÷ 3 = 16

3 Complete the missing parts.

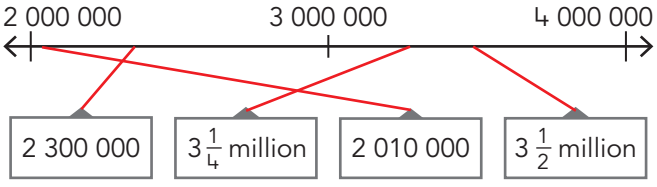
452 ÷ 4 = 113
is the same as
440 ÷ 4 + 12 ÷ 4

635 ÷ 5 = 127
is the same as
600 ÷ 5 + 35 ÷ 5

4 Write this number on the expander.
thirty-seven million, five hundred and eight thousand, six hundred and nineteen

millions			thousands			ones		
3	7		5	0	8	6	1	9

5 Match the number to its position.



6 Break each number into factors to solve these.

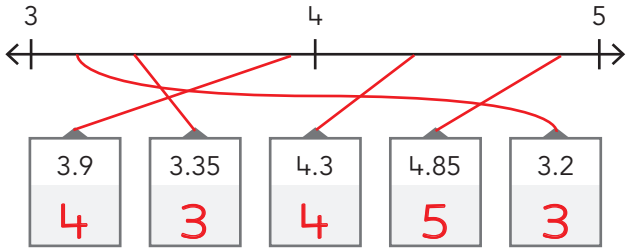
28 × 15 = 4 × 7 × 3 × 5 = 420
45 × 12 = 9 × 5 × 3 × 4 = 540

7 Double and halve to solve these.

25 × 36 = 50 × 18 = 100 × 9 = 900
48 × 25 = 24 × 50 = 12 × 100 = 1200

FRACTIONS & DECIMALS

8 Match each decimal to the number line.
Then write the nearest whole number.



9 Write > or < for each pair.

2.06 < 2.4	1.65 > 1.57
1.9 > 1.19	6.82 > 6.8
4.01 < 4.1	7.25 < 7.5

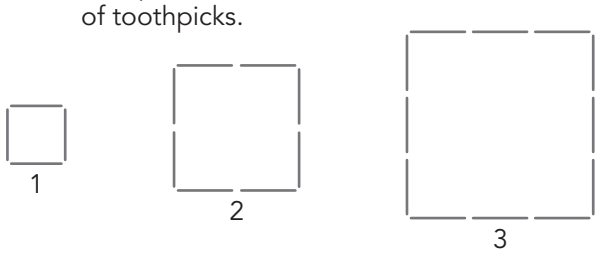
MONEY & FINANCIAL MATHEMATICS

10 Write the change you would receive.

Buy	Amount you pay	Change
• $4.60 • $3.55		$8.15

PATTERNS & ALGEBRA

11 **a.** Complete the table to show the number of toothpicks.



Shape number	1	2	3	4	5	6	7	20
Length of side	1	2	3	4	5	6	7	20
Total toothpicks	4	8	12	16	20	24	28	32

b. Write a word rule that you can use to work out the number of toothpicks in any shape number.

length of side x number of sides

c. How many toothpicks are in Shape 25? 100

d. Which shape has 160 toothpicks? 40

✱ Answers will vary. This is one example.

MEASUREMENT & GEOMETRY

USING UNITS OF MEASUREMENT

12 Write each mass in 2 ways.

$\frac{2}{5}$ kg

0.4 kg

$\frac{1}{20}$ kg

0.05 kg

13 How many 25 g bags could be filled from these amounts?

100 g	$\frac{1}{2}$ kg	$\frac{1}{4}$ kg	1 kg
4	20	10	40

14 Write the mass for the number of items.

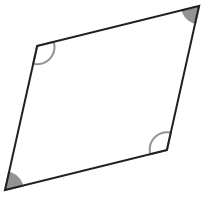
400 g

	Bottles of chocolate flavouring					
Number of bottles	2	5	8	10	20	25
Total kg	0.8	2	3.2	4	8	10

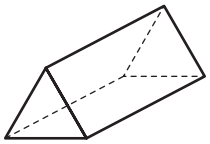
SHAPE

15 What do you notice about the opposite angles of this parallelogram?

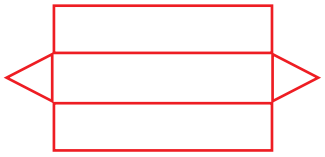
Two opposing angles are acute and the other two opposing angles are obtuse.



16 Name the 3D object and draw a net to match.



triangle-based prism



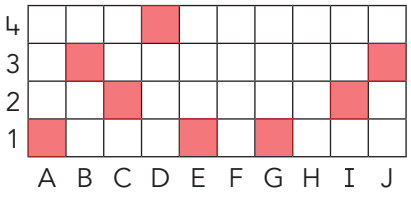
LOCATION & TRANSFORMATION

17 Shade these squares.

B3 E1 I2

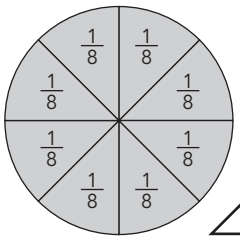
D4 G1 J3

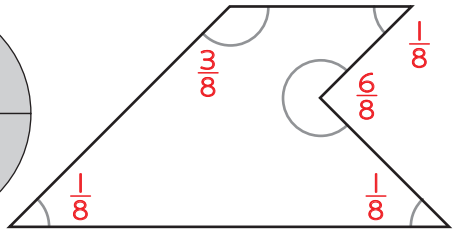
A1 C2



GEOMETRIC REASONING

18 Refer to the angle tester.
Write the amount for each angle.





STATISTICS & PROBABILITY

CHANCE

19 Write these numbers in the table.

a. Write a fraction to show the chance of rolling each number on a regular six-sided die.

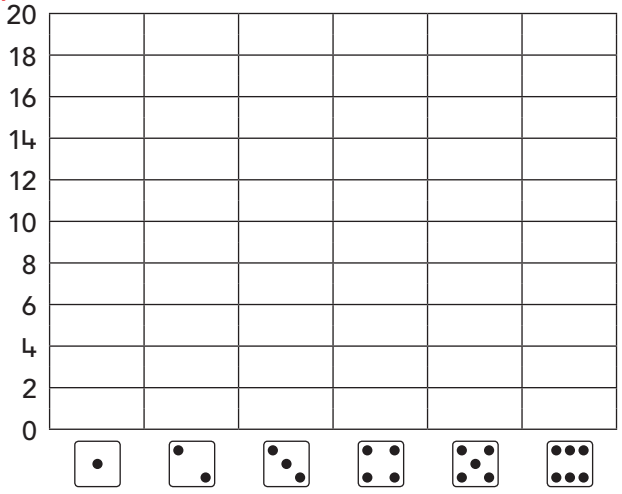
✱ **b.** If you rolled a die 30 times, predict how many times you would roll each number.

✱ **c.** Roll a die 30 times and record the results with tallies.

	1	2	3	4	5	6
Fraction	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$
Prediction						
Number of Rolls						

DATA REPRESENTATION & INTERPRETATION

20 ✱ Complete this bar graph to show the number of times each die number was rolled in Question 19.



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