MATHEMATICS – YEAR 4

HOLIDAY REINFORCEMENT-WORK – JULY , AUGUST 2018

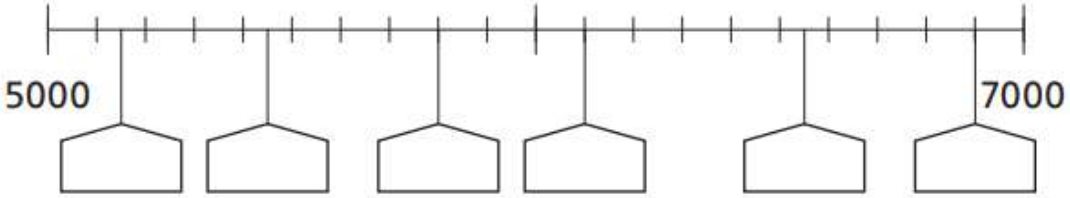
NAME : _____

What number?

Write the missing digits to make each sentence correct.

1. 3045 > 3 ☐☐5
2. 8020 > 8 ☐☐9
3. 6969 < 6 ☐☐9
4. 5002 > 5 ☐☐1

5. Write the number on each flag.



Addition grid

6. Complete the addition grid.

+	3459	7071	1009	6880
2000	5459			
200				
20		7091		

Choose three numbers. Write the total.

Do this four times.

74	36	18	55	42

7 ☐ + ☐ + ☐

☐

9 ☐ + ☐ + ☐

☐

8 ☐ + ☐ + ☐

☐

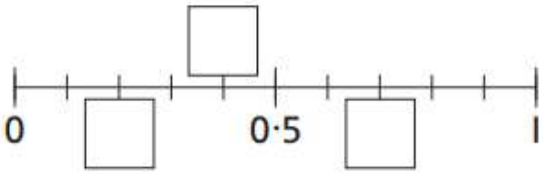
10 ☐ + ☐ + ☐

☐

Decimal fractions

Write the missing numbers on each line.

1



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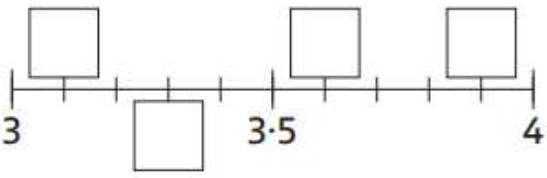


Decimal and fraction matching

3 Draw lines between matching decimals and fractions.

$\frac{1}{10}$	5·5	$\frac{7}{10}$	0·3	$\frac{1}{2}$	0·1	2·4

0·7	$2\frac{4}{10}$	2	0·5	$\frac{3}{10}$	$5\frac{1}{2}$

Quick and easy

Ask someone to time you or set a timer.

How many can you do in 3 minutes?

1. 4730 – 700 = ____
2. 1606 + 150 = ____
3. 8573 + 400 = ____
4. 880 + 8002 = ____
5. 3003 + 330 = ____
6. 6492 – 402 = ____
7. 5219 – 209 = ____
8. 9494 + 500 = ____
9. 1301 + 700 = ____
10. 4888 – 808 = ____
11. 6253 – 250 = ____
12. 2250 – 250 = ____

Onwards and upwards

Continue each sequence by writing the next four numbers.

13 465 565 665 765 _____ _____ _____ _____

14 6557 6567 6577 6587 _____ _____ _____ _____

15 8520 8420 8320 8220 _____ _____ _____ _____

16 1010 1120 1230 1340 _____ _____ _____ _____

17 9969 9959 9949 9939 _____ _____ _____ _____

Puzzle it out

Three of these calculations are wrong and three are right.
Find the wrong ones and work out the correct answers.

18 3270 – 7 = 3267 _____

19 1900 + 201 = 2101 _____

20 6699 + 19 = 6718 _____

21 5225 – 525 = 4700 _____

22 4783 – 741 = 4043 _____

23 2003 – 14 = 2989 _____

24 Using just the digits 0, 1, 2, 3 and 9, create a subtraction like this.

■○■○ − ★○ = ♦♦♦○

□□□□ − □□ = □□□□

Decimal dynamos

Draw <, > or = between each pair of decimal numbers.

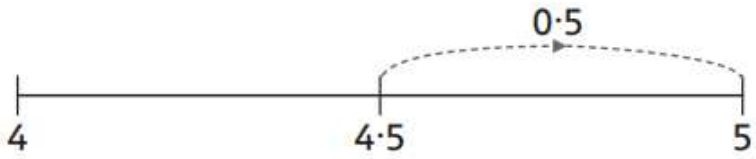
1. 3·4 ☐ 4·3
2. 1·2 ☐ 1·9
3. 6·9 ☐ 6·1
4. 0·9 ☐ 1·3

Working with decimals

Round each number to the nearest whole number.

5. 3·6 → ☐
6. 8·1 → ☐
7. 9·4 → ☐
8. 6·6 → ☐
9. 4·5 → ☐
10. 9·9 → ☐

Write the amount to add to get to the next whole number.



11 4·5 + ☐ = ☐

12 9·1 + ☐ = ☐

13 6·7 + ☐ = ☐

14 2·2 + ☐ = ☐

Take each card number in turn. Divide it by 10. Write the answer.

6·4	3·8	15·5	0·3	4·7	0·9	13·1

15 ☐

16 ☐

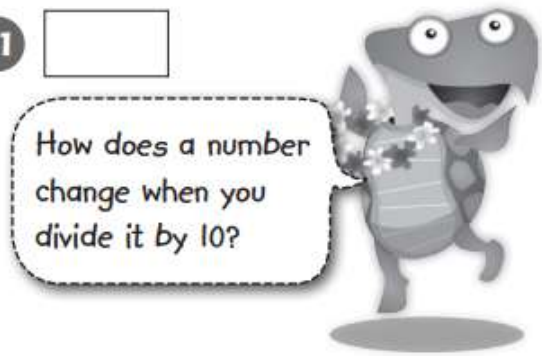
17 ☐

18 ☐

19 ☐

20 ☐

21 ☐



Decimal challenge!

22 Joe is thinking of a one-place decimal number.
It rounds to 11. Its digits add to 8.

What number is it? ☐

Positive and negative

Continue each sequence.

8, 5, 2, -1, ☐, ☐, ☐

-14, -10, -6, ☐, ☐, ☐

7, 5, 3, 1, ☐, ☐, ☐

30, 20, 10, ☐, ☐, ☐, ☐

Grand totals

1 Tick the addition you estimate has the largest total. Complete the additions. Were you correct?

```
  357      478      129
  124      264      596
+ 373    +  56    + 128
-----    -----    -----

-----    -----    -----
```

Wow subtractions!

Complete each of these subtractions to find out why they will make you say wow!

2

```
  718       700   10   8
- 385     - 300   80   5
-----     --------------

-----     --------------
```

3

```
  839
- 284
-----

-----
```

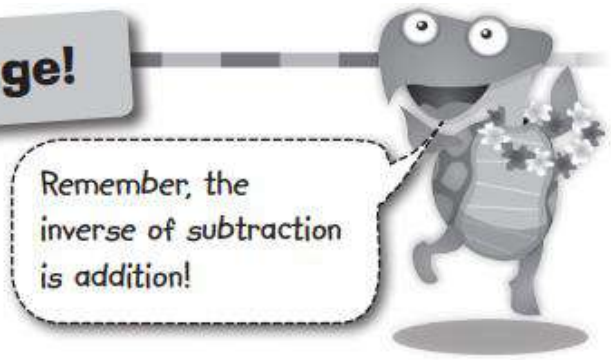
4

```
  881
- 437
-----

-----
```

5

```
  983
- 317
-----

-----
```

Wow subtraction challenge!



6 Invent your own wow subtraction.

7 Write the missing digits to make the subtraction work. Is there more than one solution?

	□	7	2
−	3	□	9
	2	4	□

Mystery subtraction

Complete the first subtraction.
Find the missing numbers in the second subtraction.

1

	300	120	
	~~400~~	~~30~~	14
–	200	80	6

2

	☐	☐	
	~~500~~	~~40~~	13
–	200	60	☐
	☐	70	5

Complete these subtractions.

3

	600	70	4
–	200	50	8

4

	400	50	3
–	200	60	8

5

	200	20	9
–	100	50	4

Frog subtractions

Use Frog to complete these subtractions:

6 700 – 465 = ☐ 

7 300 – 278 = ☐ 

8 500 – 383 = ☐ 

Easy and speedy

Write the missing digits to make each sentence correct.

1. $4 \times 7 = \square$
2. $\square \times 7 = 35$
3. $7 \times \square = 49$
4. $\square \times 7 = 21$
5. $9 \times 7 = \square$
6. $6 \times 7 = \square$
7. $\square \times 7 = 77$
8. $12 \times 7 = \square$

Some subtracting

Find the answers to these subtractions.

9.
	300	130	
	~~400~~	~~30~~	7
−	100	60	3

10.
	100	110	13
	~~200~~	~~20~~	~~3~~
−	100	70	8

11.
	200	140	
	~~300~~	~~40~~	5
−	100	70	4

Six or nine?

1 Draw circles around the multiples of 6.
Draw triangles around the multiples of 9.
Which numbers have a circle and a triangle?

54 63 48 18 30 42 81 126 27 414 108 66 243 24 72

Grid multiplication

2 Draw lines to join the multiplications with the same product.

60 × 4 = ☐

60 × 3 = ☐

15 × 8 = ☐

40 × 6 = ☐

30 × 4 = ☐

20 × 10 = ☐

40 × 5 = ☐

30 × 6 = ☐

Complete the grid multiplications.

3

×	4	6	
6			= ☐

4

×	3	4	
9			= ☐

Division challenge!

4 Show Jim how to do divisions by solving 75 ÷ 4.

5 Would the answer be bigger or smaller if you divided 75 by 3?

_____

Easy and speedy

Write the missing digits to make each sentence correct.

1 4 × 7 = ☐

2 ☐ × 7 = 35

3 7 × ☐ = 49

4 ☐ × 7 = 21

5 9 × 7 = ☐

6 6 × 7 = ☐

7 ☐ × 7 = 77

8 12 × 7 = ☐

$76 \div 4 =$ ☐

$132 \div 6 =$ ☐

$75 \div 3 =$ ☐

$96 \div 4 =$ ☐

Fizzing factors

Write the factor pairs of each of these numbers.

36 48 30 45 24

7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐

Solve these calculations.

12 240 ÷ 6 = ☐

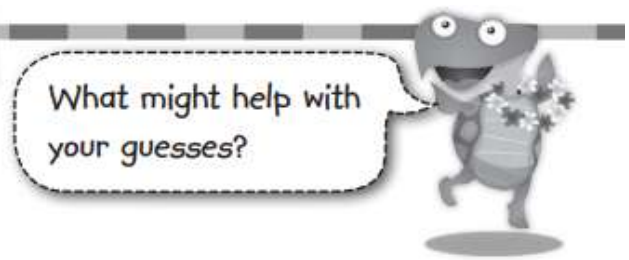
13 120 × 4 = ☐

14 360 ÷ 9 = ☐

15 300 ÷ 15 = ☐

16 90 × 5 = ☐

Guess the remainder



Guess the remainder for each division.

138 ÷ 7	94 ÷ 3	87 ÷ 4	113 ÷ 5
4	5	6	7

Work each one out using your own favourite method.

8	9	10	11

Find the amount that each person earns.

£664 per week for 6 weeks

£138 per day
for 5 days

£572 per week
for 8 weeks

Mystery multiplications

Fill in the missing numbers in these multiplications.

1

×	400	50	8
7			56

[ ] + [ ] + [ ] = [ ]

2

458
× 7

[ ] ← 7 × 400

[ ] ← 7 × 50

\+ [ ] ← 7 × 8

3206

Complete these multiplications.

3 5 × 367

4 6 × 184

5 7 × 273

Adding fractions

6 $\frac{2}{5} + \frac{3}{5} =$ ☐

7 $\frac{3}{4} + \frac{3}{4} =$ ☐

8 $\frac{5}{6} + \frac{5}{6} =$ ☐

\

Fraction challenge!

9 Three fractions add together to make 1. They have the same denominators but different numerators. What could they be?

☐ + ☐ + ☐ = 1

Double or quits

1 Double the numbers in squares and halve the numbers in circles. Can you find three pairs of answers with a difference of 100?

126	856	264	592	117	668	245	304	198	780
☐	○	☐	○	☐	○	☐	○	☐	○

Fraction matching

2 Match each fraction to its equivalent.

$\frac{3}{6}$	$\frac{4}{5}$	$\frac{2}{3}$	$\frac{2}{6}$	$\frac{1}{4}$
$\frac{6}{9}$	$\frac{3}{12}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{8}{10}$

Machine calculations

1 236 →  → 

2 58 →  → 

3 314 →  → 

4 816 →  → 

5 336 →  → 

Fractions of amounts

1

$\frac{1}{4}$ of 72 = ☐ $\frac{3}{4}$ of 72 = ☐ $\frac{1}{6}$ of 66 = ☐

$\frac{5}{6}$ of 66 = ☐ $\frac{1}{5}$ of 200 = ☐ $\frac{3}{5}$ of 200 = ☐

Tenths and hundredths

Write the totals.

2 4·56 + 0·1 = ☐

3 7·82 – 0·01 = ☐

4 8·23 + 0·01 = ☐

5 2·46 – 0·1 = ☐

6 5·05 + 0·01 = ☐

7 4·99 + 0·01 = ☐

Tenths and hundredths

I whole									
$\frac{1}{2}$					$\frac{1}{2}$				
$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$
$\frac{1}{5}$		$\frac{1}{5}$			$\frac{1}{5}$			$\frac{1}{5}$	
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{8}$	$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$		$\frac{1}{8}$
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$		$\frac{1}{10}$	

Use the fraction wall to write a fraction equivalent to

8 $\frac{1}{3}$ ☐

9 $\frac{3}{4}$ ☐

10 $\frac{2}{3}$ ☐

11 $\frac{2}{5}$ ☐

What needs to be added to each fraction ($\frac{1}{3}$, $\frac{3}{4}$, $\frac{2}{3}$, $\frac{2}{5}$) to make 1?

12 ☐ 13 ☐ 14 ☐ 15 ☐

Look at the denominator of each fraction to help you.

Fraction challenge!

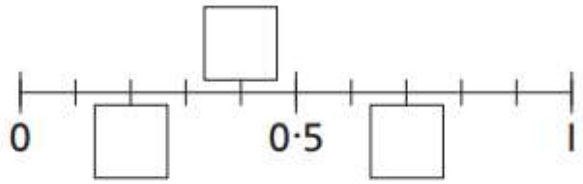
16 Write five fractions that have a total of 2.

☐ + ☐ + ☐ + ☐ + ☐ = 2

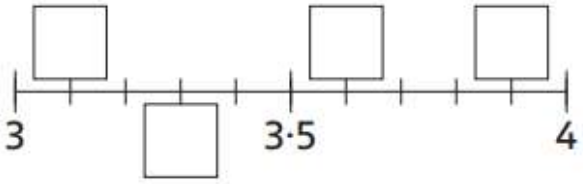
Decimal fractions

Write the missing numbers on each line.

1



2



Decimal and fraction matching

3 Draw lines between matching decimals and fractions.

$\frac{1}{10}$	5·5	$\frac{7}{10}$	0·3	$\frac{1}{2}$	0·1	2·4

0·7	$2\frac{4}{10}$	2	0·5	$\frac{3}{10}$	$5\frac{1}{2}$

Decimal grid

Look at the calculations. Write each answer on the grid.

31 ÷ 10	0·1 × 10	24 ÷ 10	7·4 × 10	6 ÷ 10

	100s	10s	1s	0·1s
4				
5				
6				
7				
8				

Quick and easy

Write these numbers in order from smallest to largest.

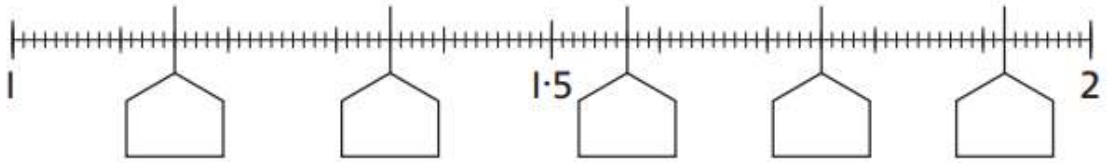
1. 3·4, 5·6, 1·9 ☐
2. 4·1, 5·5, 4 ☐
3. 7·6, 6·7, 6·9 ☐
4. 0·3, 0·7, 1 ☐
5. 9·3, 3·9, 5·2 ☐
6. 16·4, 14·6, 15 ☐

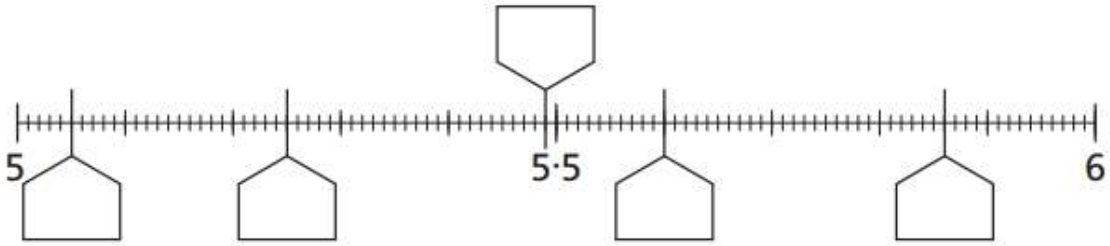
Complete each addition.

7. 14·4 + ☐ = 15
8. 6·7 + ☐ = 7
9. 8·2 + ☐ = 9
10. 10·1 + ☐ = 11
11. 7·6 + ☐ = 8
12. 9·9 + ☐ = 10

Line 'em up

Fill in the numbers marked on these number lines.

13 

14 

Write the next three numbers.

15 3·7, 3·8, 3·9, ☐, ☐, ☐

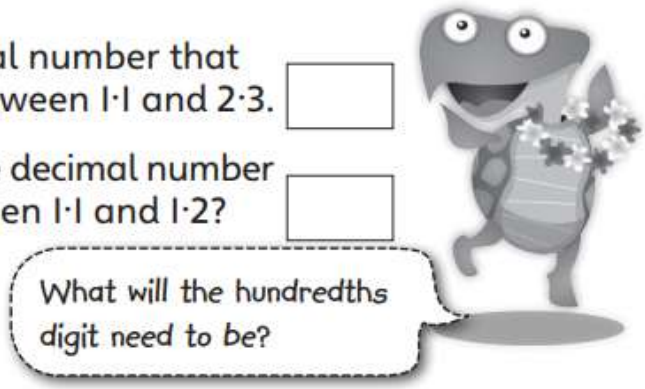
16 6·4, 6·3, 6·2, ☐, ☐, ☐

17 9·3, 9·4, 9·5, 9·6, 9·7, ☐, ☐, ☐

Decimal decisions

18 Write the one-place decimal number that comes exactly mid-way between 1·1 and 2·3. ☐

19 Can you write the two-place decimal number that comes mid-way between 1·1 and 1·2? ☐



How fast?

1 Draw lines between cards which add to 100.

21	34	48	75	63	79	66	52	37	25

Back and forth

Fill in the numbers you must subtract to get to the previous multiple of 100, and the numbers you must add to get to the next multiple of 100.

2

− 73	**573**	+ 27
− ☐	**346**	+ ☐
− ☐	**682**	+ ☐

3

− ☐	**295**	+ ☐
− ☐	**168**	+ ☐
− ☐	**444**	+ ☐

Which answer?

4 Draw the matching shape around the answer cards to match them to the question cards.

423 – 385	635 – 579	818 – 744
56	74	38

Puzzle it out

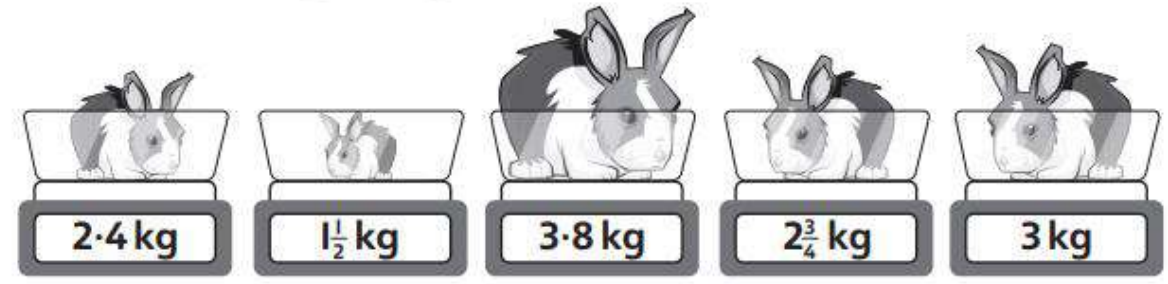
5 Five numbers are added together.
Three of them are multiples of 10.
Two of them are 1-digit numbers.
The total is a 3-digit number with three consecutive digits.

This is one possible solution:
40 + 40 + 40 + 1 + 2 = 123

What other solutions can you find?

Loads of grams!

Convert each weight to grams.



Pet weights

Work out the total weight of each pair of pets.


4657 g


2485 g


5298 g


386 g


1795 g


1949 g

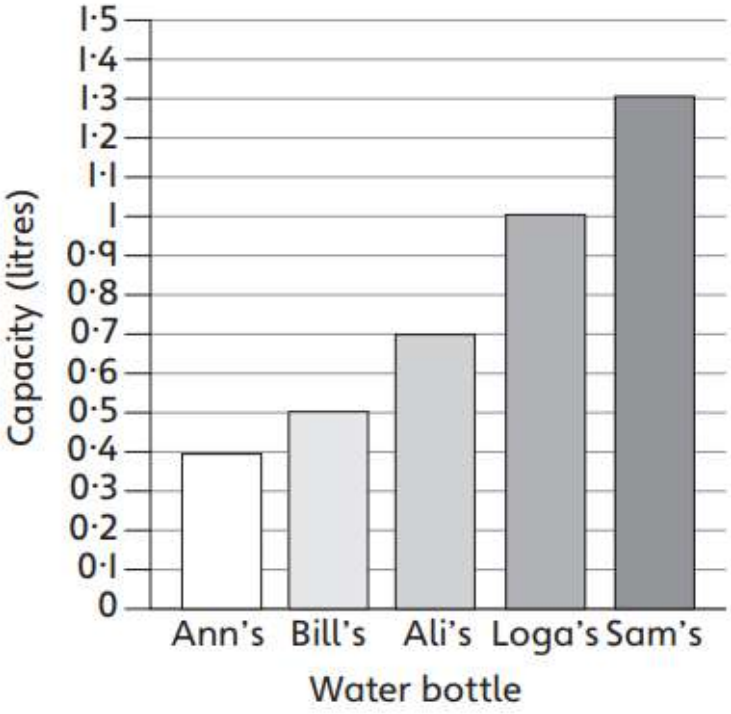
7
4657
\+ 2485
_____
____ g

8
\+
_____
____ g

9
\+
_____
____ g

Comparing capacity

This bar graph shows the capacities of different drinking bottles. Answer the questions.



10 How many millilitres does the smallest bottle hold? ____

11 How many more millilitres does Sam's bottle hold than Loga's? ____

12 How many litres do Ali's and Sam's hold altogether? ____

13 Whose bottle holds half a litre? ____

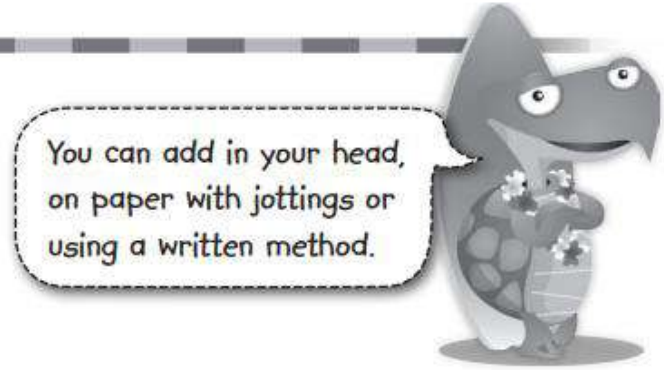
14 Which two bottles have a difference of 100 ml? ____

Make your choice

Choose two amounts. Add them and write the total.

Repeat this five times.

You must use at least two different methods to add.

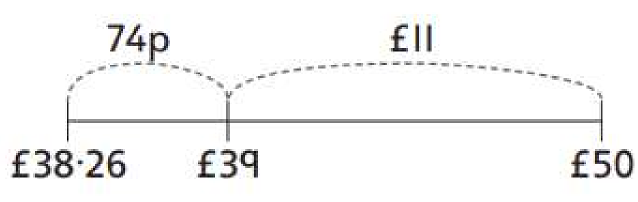


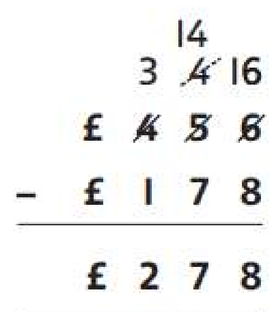
£99	£136	£54	£29·99	£45·68

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Choose again

Look at each subtraction and choose how to do it. You can make jottings on the back of this sheet if you wish.





6 £100 – £78·89 = ☐

7 £26·54 – £12·43 = ☐

8 £371 – £248 = ☐

9 £45·80 – 45p = ☐

10 £35 – £34·66 = ☐

11 £32 – £3·50 = ☐

Digit puzzle

12 A mystery number is subtracted from 500.

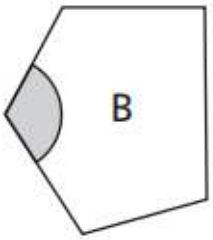
The answer has three consecutive digits and the digits of the answer add to 12.

What is the mystery number? ☐

Shapes and angles

1 Write acute, obtuse, right or reflex for each angle.

_____



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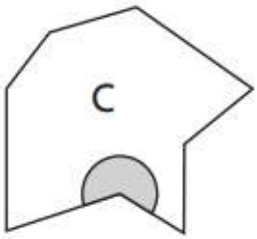

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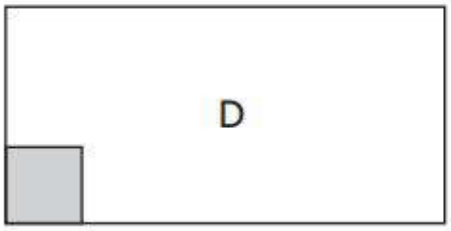

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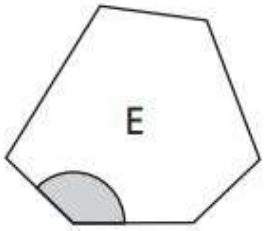

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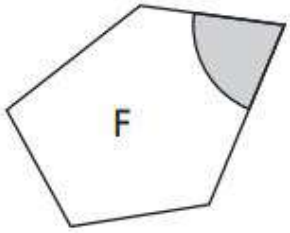

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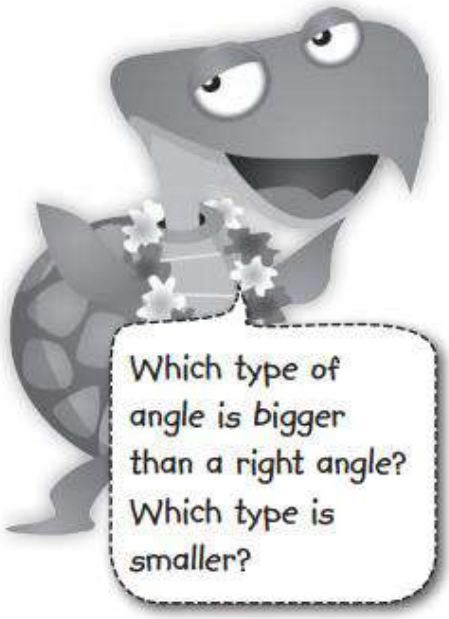


2 Write the letters of the shapes that have parallel lines.

_____

3 Write the letters of the shapes that have perpendicular lines.

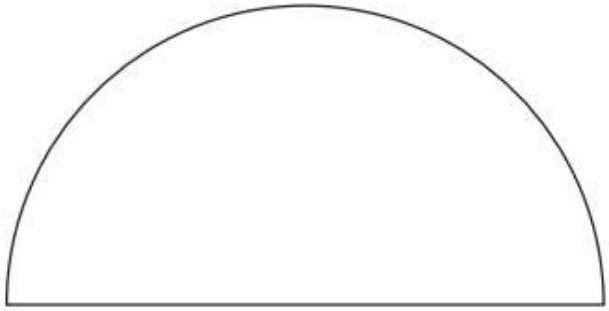
_____

Symmetry

Look at these shapes and draw all the possible lines of symmetry.

4

6



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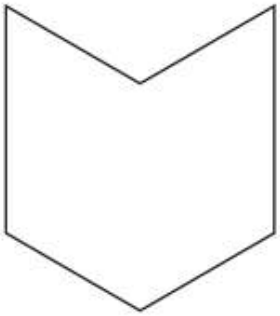

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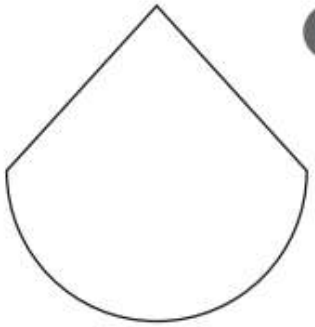

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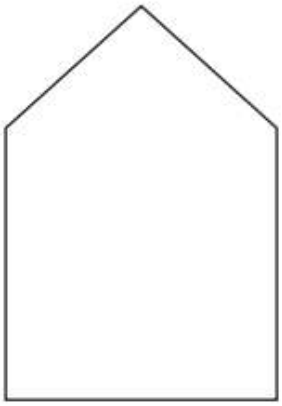


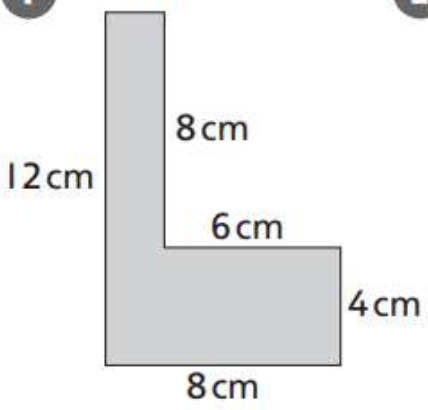
Shape challenge!

9 Draw a shape with six sides, which has just one pair of perpendicular lines, just one reflex angle and no parallel sides.

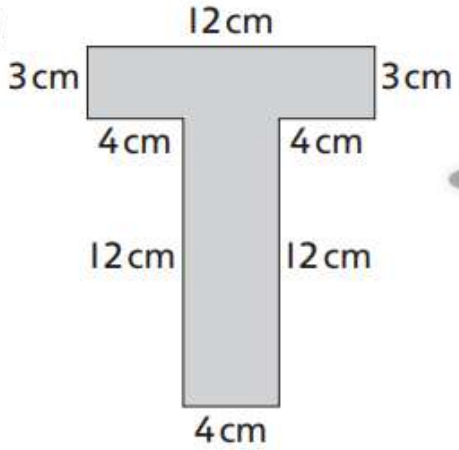
Shape up!

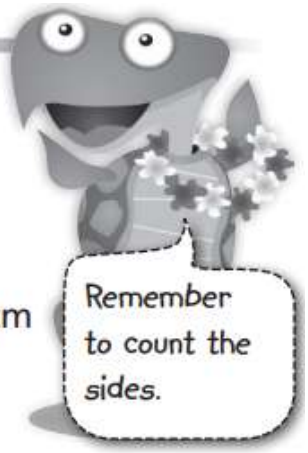
Write the name of each shape and calculate its perimeter.

1



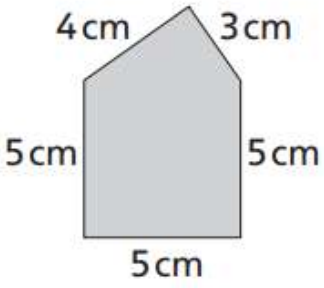
2





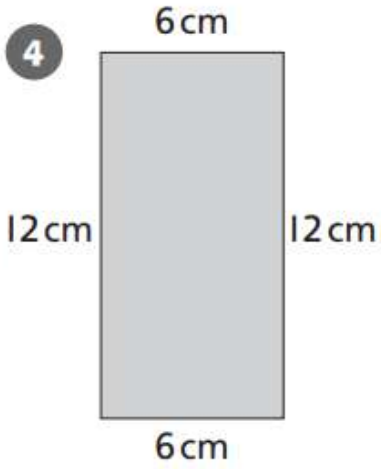
Perimeter:	Perimeter:

3



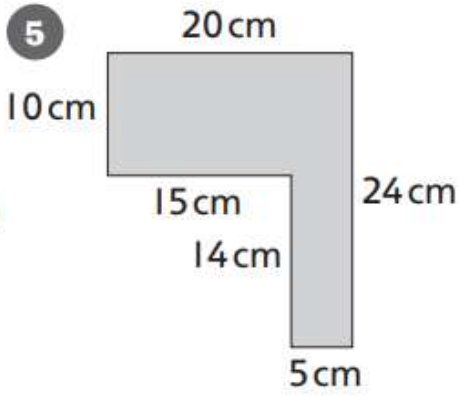
Perimeter:

4



Perimeter:

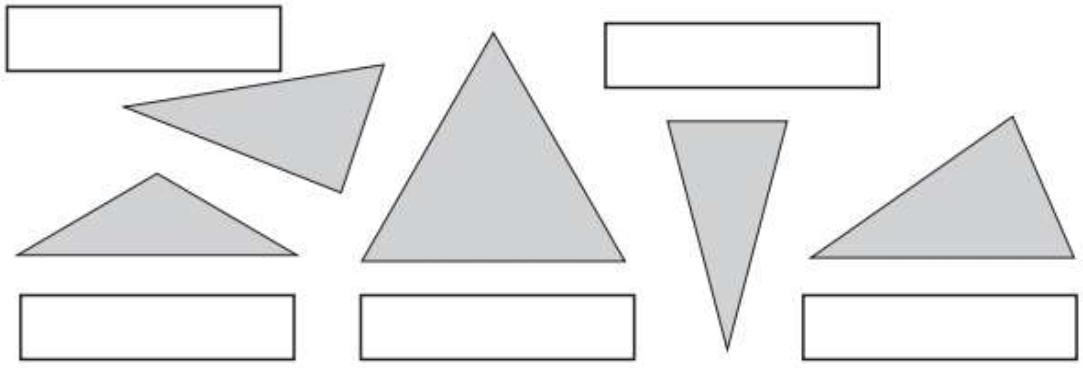
5



Perimeter:

Which triangle?

6 Look at these triangles and label each one scalene, isosceles or equilateral.



Perimeter challenge!

Draw three shapes, all with different areas but the same perimeter.

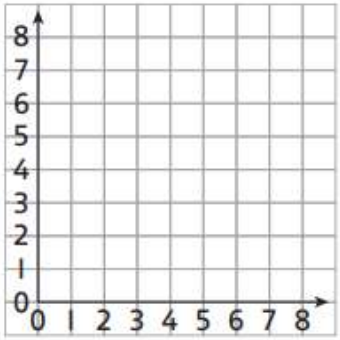
7

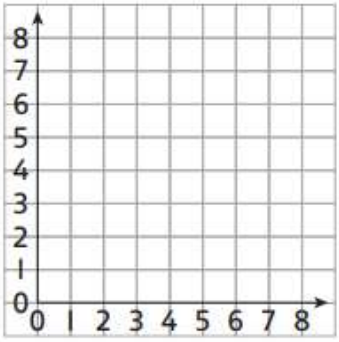
9

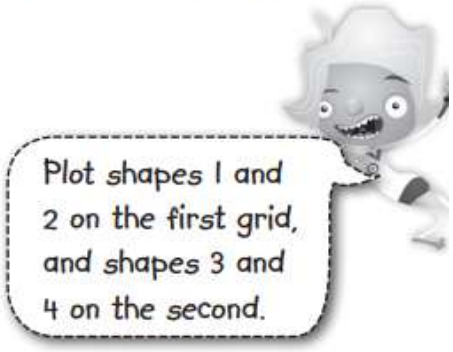
8

What polygon?

Plot the points and join them to create a polygon. Write the name of the polygon.







1 (1,1) (1,5) (4,1) (4,5)

3 (0,0) (3,0) (0,3) (3,3) (5,2)

2 (5,2) (6,7) (8,3)

4 (5,4) (8,4) (3,8) (7,6)

5 Shape 4 moves three squares down.

Write its new coordinates. ☐

What do you notice about how the coordinates have changed?

Dollars and pounds

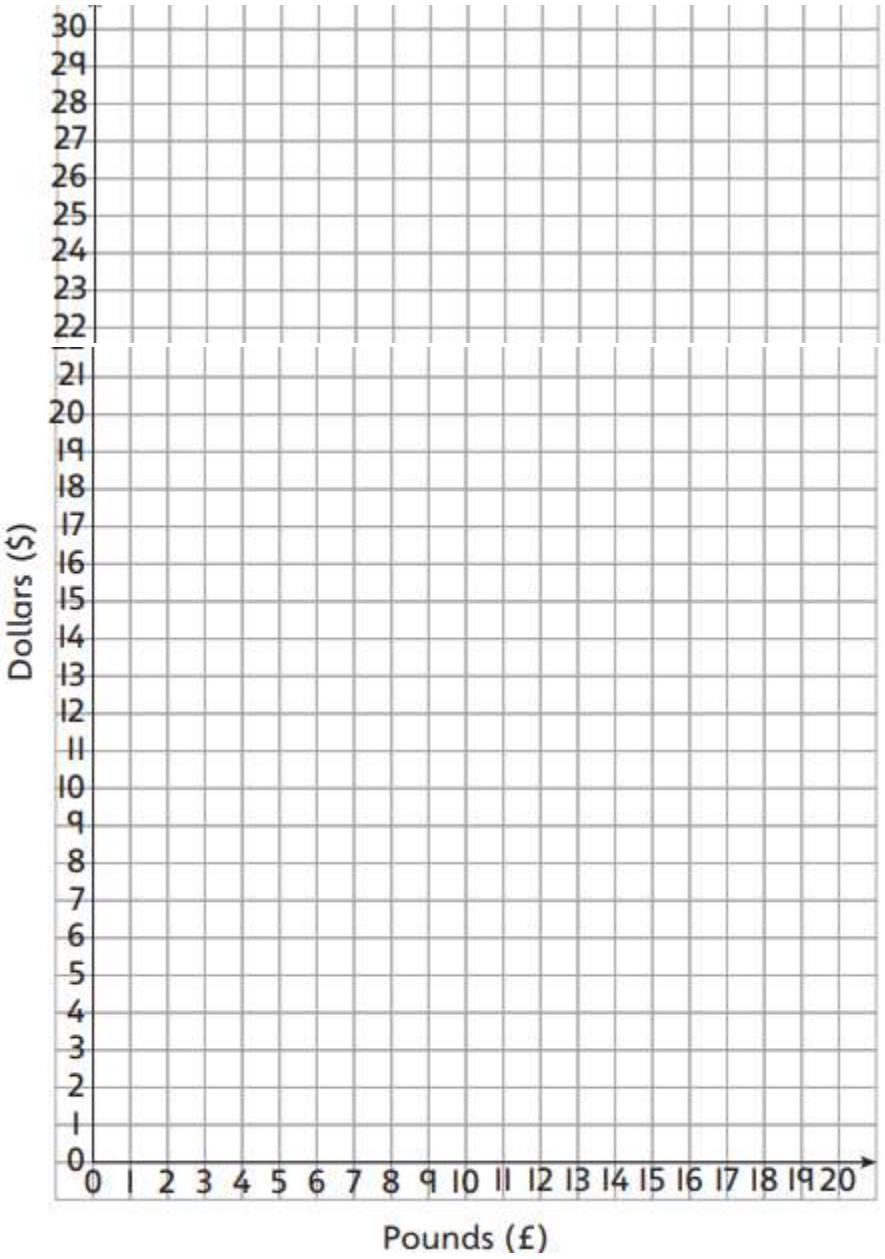
Sam is travelling to Australia.

6 Complete this table showing how many Australian dollars Sam can get for each amount of British pounds.

British Pounds		Aus. Dollars
2 pounds	buys	3 dollars
4 pounds	buys	6 dollars
☐ pounds	buys	9 dollars
8 pounds	buys	☐ dollars
☐ pounds	buys	☐ dollars
☐ pounds	buys	☐ dollars

For the last two rows, your number of pounds should not be more than 20.

7 Use the table to draw a line graph to show how many dollars Sam can get for each amount of pounds.



Line graph questions

8 How many dollars will Sam get for £15? ____

9 If Sam spends $30 in Australia, how many pounds is that? ____

What's the time?

Draw the hands on the clocks to match the times.

1 

9:45

2 

3:12

3 

12:24

4 

6:53

Count up times

Count up to the next o'clock time for each of the four clocks in questions 1 to 4.

5 ☐ minutes

7 ☐ minutes

6 ☐ minutes

8 ☐ minutes

9 Ali leaves school at quarter to four. He gets home at ten past four. How long is his journey?

_____

10 Debbie has to bake a cake for 30 minutes. She puts it in the oven at five to ten. What time should she take it out?

_____

Measuring in cm and mm

Complete these sentences.

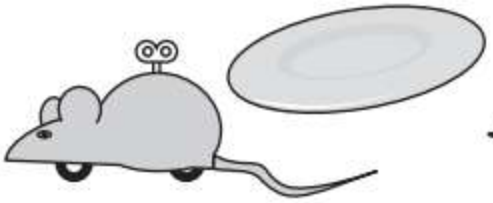
60 cm = ☐ mm

43 cm = ☐ mm

☐ cm = 220 mm

☐ mm = 18 cm

Which of these could measure 25 cm in length? Explain why you think this.



_____

_____

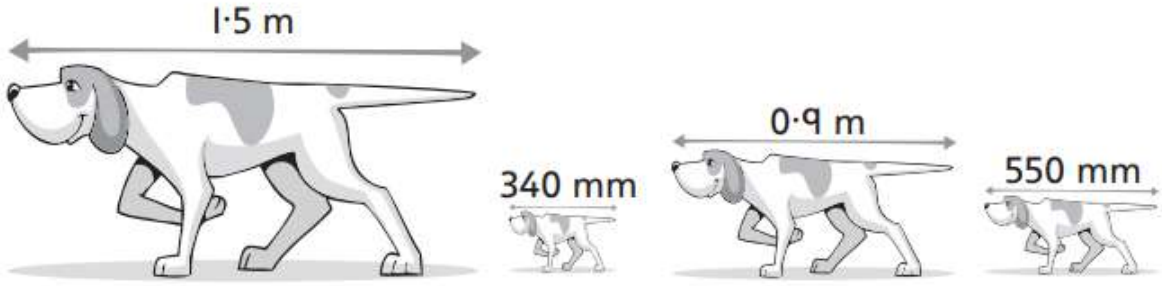
_____

_____

_____

Dog lengths

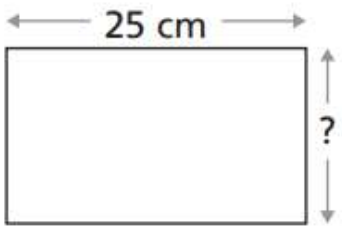
Convert each length to centimetres and then write them in order, smallest to largest.



1 ☐ 2 ☐ 3 ☐ 4 ☐

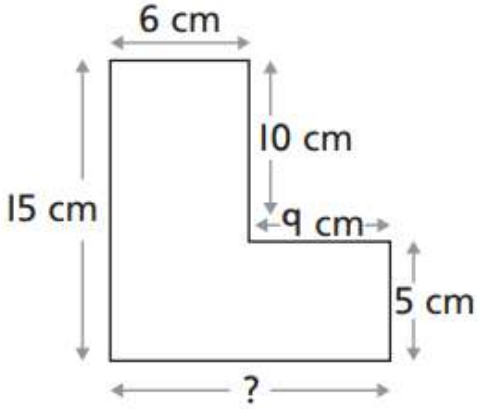
Perimeter puzzles

Work out the missing amounts in the diagrams below.



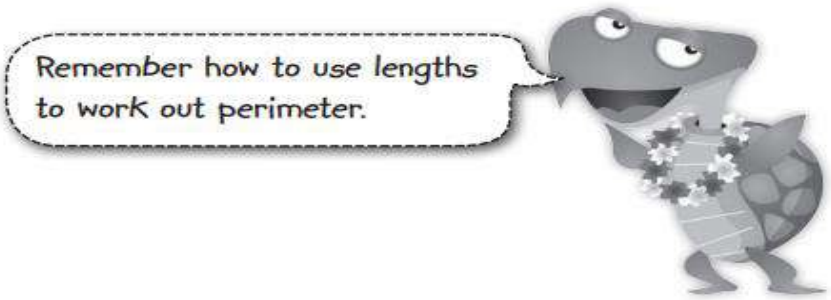
Perimeter = 80 cm

Perimeter = 81 cm



5 ☐ 6 ☐ 7 ☐

Perimeter = ☐



Tell the time

Write each clock time in digital 24-hour format.

pm

pm

am

pm

8 ____ 9 ____ 10 ____ 11 ____

12 A coach journey lasts $3\frac{1}{2}$ hours. The coach arrives at its destination at midday. The first half of the journey takes twice as long as the second half. At what time does the coach reach the halfway point? ____