Year 6 Daily Maths

Weeks 1/2/3

GS and NC Group

Maths Week 1 Lesson 1

Workspace for video lesson

W1 L1 Sats Questions **For work in video lesson**

Here are six cards.

× 10	× 100	× 1000
÷ 10	÷ 100	÷ 1000

Use a card to complete each calculation.

5.3 ☐ = 0.53

5.3 ☐ = 5300

5.3 ☐ = 0.053

Complete these calculations.

15 × 100 = ☐

☐ × 10 = 1500

☐ ÷ 100 = 150

150 ÷ 10 = ☐

Here are five number cards.

0.47	10	100	1000	4.07

Use **four** of the cards to complete these calculations.

47 ÷ ☐ = ☐

☐ × ☐ = 40.7

W1 L1 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Complete this table with the missing numbers.

One row has been done for you.

Number	1,000 more
3,500	4,500
85	
	9,099
	15,250

Write the missing number to make this **division** correct.

75 ÷ ☐ = 7.5

Complete the number sentences using these cards.

× 10	÷ 10	× 100	÷ 100

25 ☐ = 2.5

7 ☐ = 0.07

3.6 ☐ = 360

Maths Week 1 Lesson 2

Workspace for video lesson

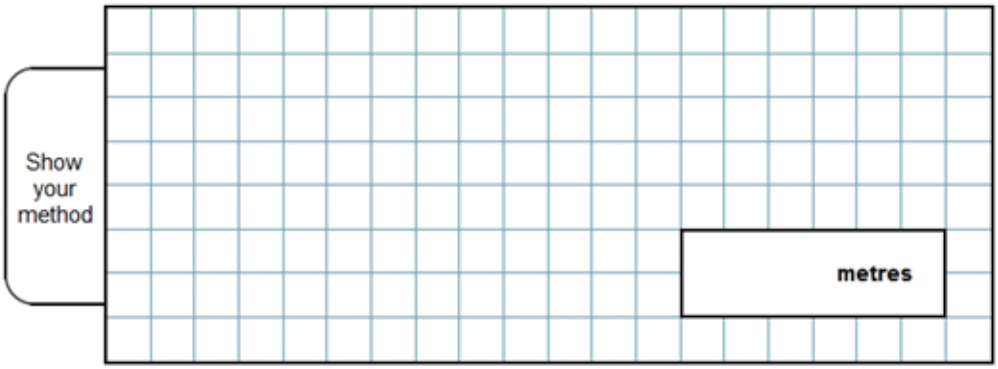
W1 L2 Sats Questions For work in video lesson

Jacob cuts **4** metres of ribbon into **three** pieces.

The length of the first piece is **1.28** metres.

The length of the second piece is **1.65** metres.

Work out the length of the third piece.

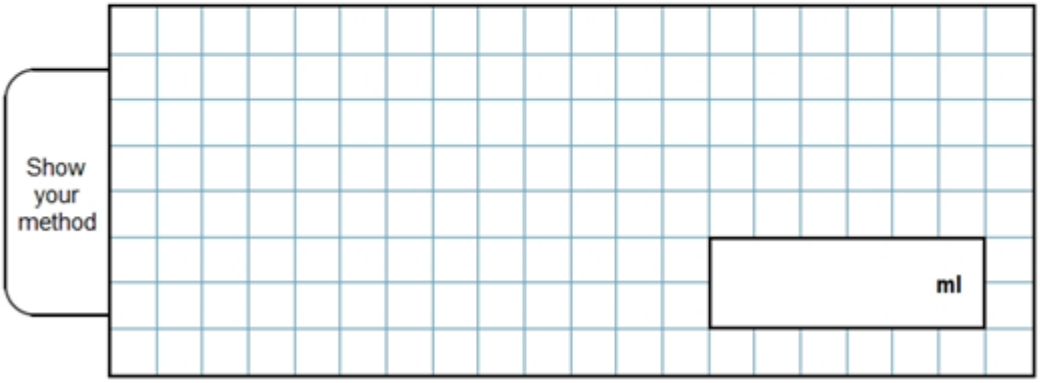


A bottle holds **1 litre** of lemonade.

Rachel fills **5** glasses with lemonade.

She puts **150 millilitres** in each glass.

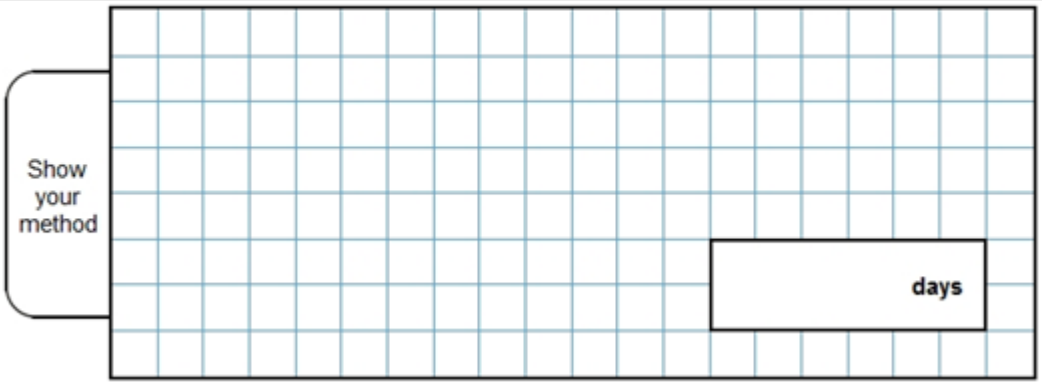
How much lemonade is left in the bottle?



A packet contains **1.5 kilograms** of guinea pig food.

Remi feeds her guinea pig **30 grams** of food each day.

How many days does the packet of food last?



W1 L2 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

A bottle contains 568 millilitres of milk.

Jack pours out **half a litre**.

How much milk is left?

Megan wants to fill a bucket with water.

A bucket holds 6 litres.

A jug holds 500 millilitres.

How many jugs of water does Megan need to fill an empty bucket?

Show your method

Put these masses in order, starting with the heaviest.

800 g $\frac{1}{2}$ kg 1 kg 60 g

heaviest

Maths Week 1 Lesson 3

Workspace for video lesson

W1 L3 Sats Questions **For work in video lesson**

Liam, Sarah and Amy buy lunch at a salad bar.

salad bar			
Salads		Desserts	
cheese	£1.20	banana	25p
egg	90p	apple pie	50p
tuna	£1.60	yogurt	35p

Liam has £2.50 to spend.

He buys a tuna salad and an apple pie.

How much money has he got left?

p

Sarah buys a cheese salad and a yogurt.

Amy buys an egg salad.

How much **more** does Sarah pay than Amy?

Emily, Ben and Nisha take part in a sponsored swim to collect money for charity.

Emily collects £2.75 **more** than Nisha.

Ben collects £15

Nisha collects £7 **less** than Ben.

Altogether how much money do the three children collect?

Show your method

£

W1 L3 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

John buys one toy car and one pack of stickers.

£1.49 **£1.64**

He pays with a **£10** note.

How much change does John get?

Show your method

£

At the start of June, there were 1,793 toy cars in the shop.

During June,

- 8,728 more toy cars were delivered
- 9,473 toy cars were sold.

How many toy cars were left in the shop at the end of June?

Show your method

Write the three missing digits to make this **addition** correct.

	5	3	2		9
+		7	4	2	
		0	6	7	6

Maths Week 1 Lesson 4

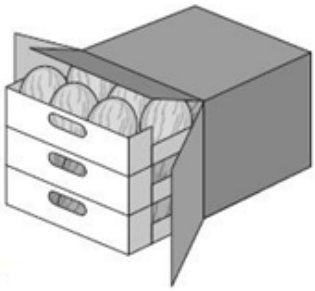
Workspace for video lesson

W1 L4 Sats Questions **For work in video lesson**

A box contains trays of melons.

There are 15 melons in a tray.

There are 3 trays in a box.



A supermarket sells **40** boxes of melons.

How many melons does the supermarket sell?

Show your method

melons

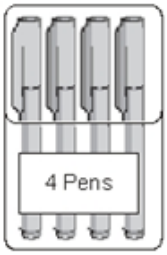
50 children need **two** pencils each.

There are 20 pencils in a box.

How many boxes of pencils are needed?

boxes

50 children need **one** pen each.



Pens are sold in packs of 4

How many packs of pens need to be bought?

packs

Write the **three** missing numbers in this multiplication grid.

×	8	5	
4		20	28
5	40		35
3	24	15	21

W1 L4 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Dev has a bag of 50p coins and Holly has a bag of 20p coins.

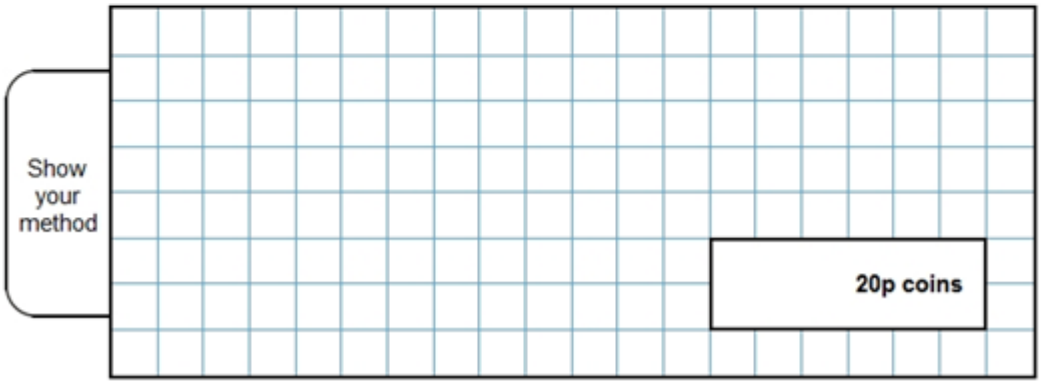
Dev's bag

Holly's bag

Both bags have the same amount of money in.

There are **thirty** 50p coins in Dev's bag.

How many 20p coins are there in Holly's bag?

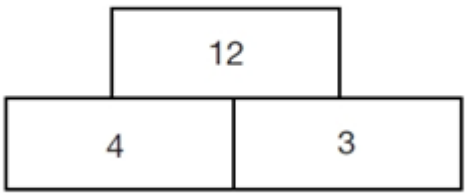


>	=	<

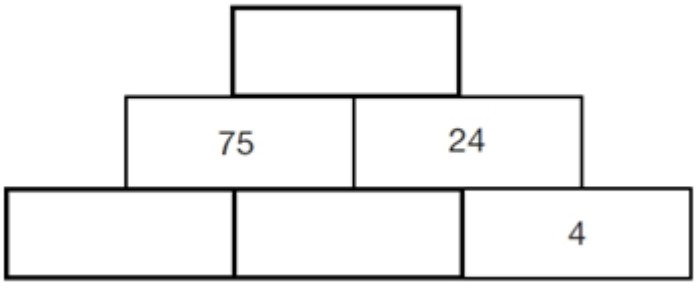
Write the correct symbol in each box to make the statements correct.

11×12		15×10
$90 \div 30$		$60 \div 20$
$120 \div 4$		$160 \div 8$
30×8		100×10

In this tower, two numbers are **multiplied** to give the number above.



Write the missing numbers in the tower below to make it correct.



Maths Week 2 Lesson 1

Workspace for video lesson

W2 L1 Sats Questions **For work in video lesson**

Write the missing numbers.

Factors of 20 = {1, ..., ..., ..., ..., 20}

1 mark

Write **one** number which fits **all three** of these statements.

It is a multiple of 4

It is a multiple of 6

It ends in '8'

1 mark

Explain why a number which ends in '3' **cannot** be a multiple of 4

The factor pairs of 8 are

1	and	8	
2	and	4	

Write all the factor pairs of 42

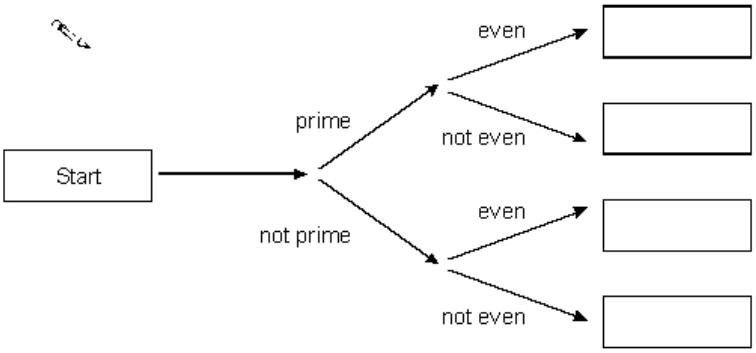
1	and	42	
2	and		
	and		
6	and		

Here is a diagram for sorting numbers.

Write these three numbers in the correct boxes.

You may not need to use all of the boxes.

9 **17** **20**



W2 L1 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

5) Write down all the factor pairs of **48** in the box below. One has been done already.

Every number has at least two factors: 1 and itself.

1 and 48

1 mark

6) Write down all the common factors of **10** and **25**.

.....

1 mark

7) Circle the prime numbers in the box.

2	**7**	**9**	**17**	**27**
31	**39**	**45**	**49**	

9) Write a prime number in each box to make these calculations correct.

$\square \times \square = 15$

$\square \times \square \times \square = 70$

Maths Week 2 Lesson 2

Workspace for video lesson

W2 L2 Sats Questions **For work in video lesson**

Sam and Ben share a pizza with their Dad.

Sam ate $\frac{1}{3}$ of the pizza.

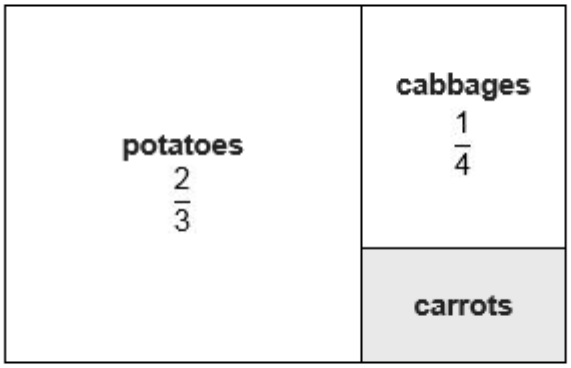
Ben ate $\frac{1}{6}$ of the pizza.

Dad ate the rest.

What fraction of the pizza did Dad eat?

This is a diagram of a vegetable garden.

It shows the fractions of the garden planted with potatoes and cabbages.



Not to scale

The remaining area is planted with carrots.

What **fraction** of the garden is planted with carrots?

Complete the number sentences.

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

$\square \div 5 = \frac{2}{13}$

W2 L2 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Caley and Shaun have made a lasagne pie.

Caley eats $\frac{3}{8}$ of it and Shaun eats $\frac{1}{2}$.

How much more of the lasagne pie did Shaun eat than Caley?

Circle the correct answer in each box.

$5\frac{2}{9} + 4\frac{2}{3} =$ [$10\frac{4}{9}$ | $9\frac{4}{12}$ | $9\frac{8}{9}$]

$3\frac{3}{5} - 1\frac{2}{3} =$ [$2\frac{1}{2}$ | $1\frac{1}{12}$ | $1\frac{14}{15}$]

Work out each of these calculations. Simplify your answers.
One has been done for you.

$\frac{3}{5} \times \frac{5}{6} = \frac{3 \times 5}{5 \times 6} = \frac{15}{30} = \frac{1}{2}$

Multiply together the numerators.

Multiply together the denominators.

$\frac{4}{9} \times \frac{3}{11} =$ .....

$\frac{5}{12} \times \frac{1}{8} =$ .....

$\frac{2}{3} \times 15 =$ .....

Rachel knits a scarf with **12** stripes.

Each stripe on the scarf uses $\frac{3}{4}$ of a ball of wool.

How many balls of wool does she use?

Maths Week 2 Lesson 3

Workspace for video lesson

W2 L3 Sats Questions **For work in video lesson**

Calculate $\frac{7}{16}$ **of 288**

Calculate $\frac{3}{8}$ of **980**

Calculate $\frac{3}{4}$ of **£15**

Calculate $\frac{1}{5}$ of **325**

On Saturday Lara read $\frac{2}{5}$ of her book.

On Sunday she read the **other** 90 pages to finish the book.

How many pages are there in Lara's book?

Show your method

pages

In a class, 18 of the children are girls.

A quarter of the children in the class are boys.

Altogether, how many children are there in the class?

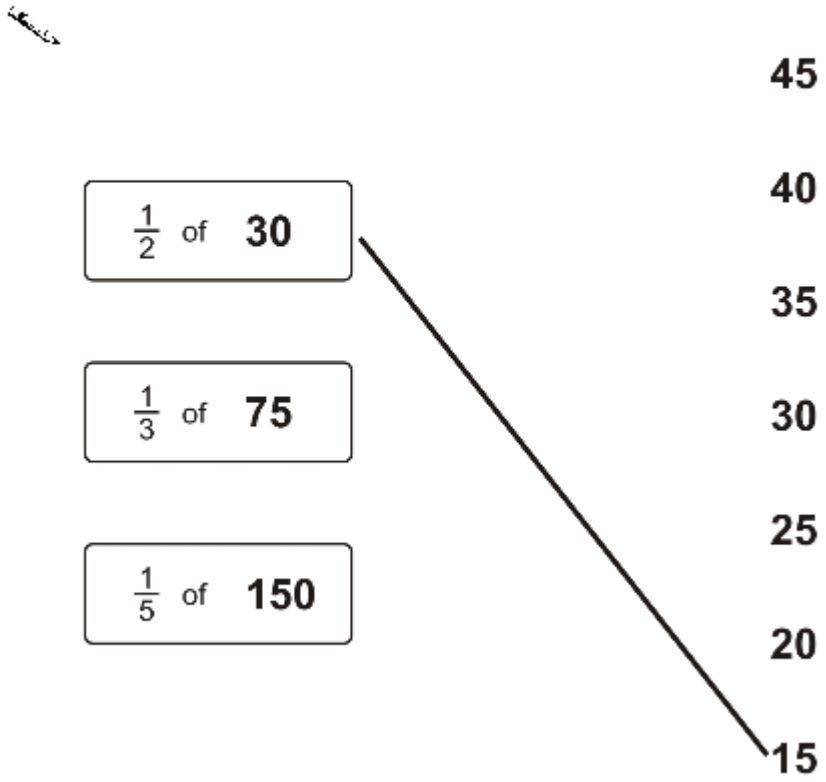
Show your method

W2 L3 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Match each box to the correct number.

One has been done for you.



Calculate of $\frac{5}{12}$ of **378**

Calculate $\frac{3}{4}$ of **840**

Calculate $\frac{7}{8}$ **of 5000**

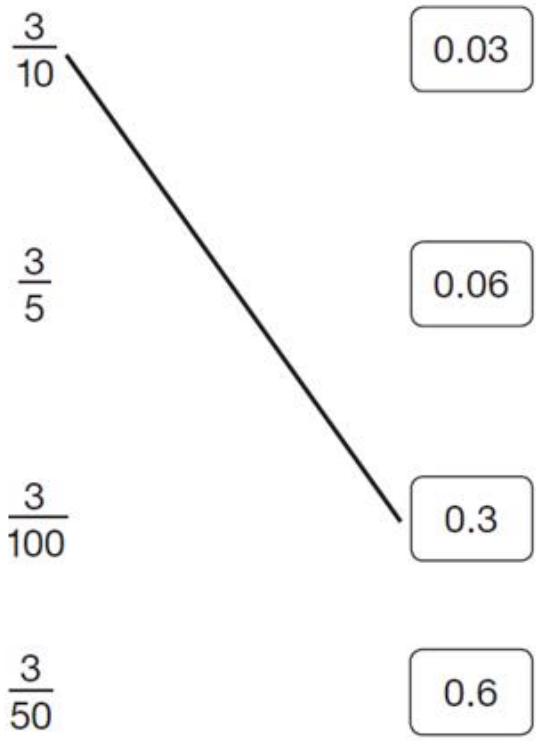
Maths Week 2 Lesson 4

Workspace for video lesson

W2 L4 Sats Questions **For work in video lesson**

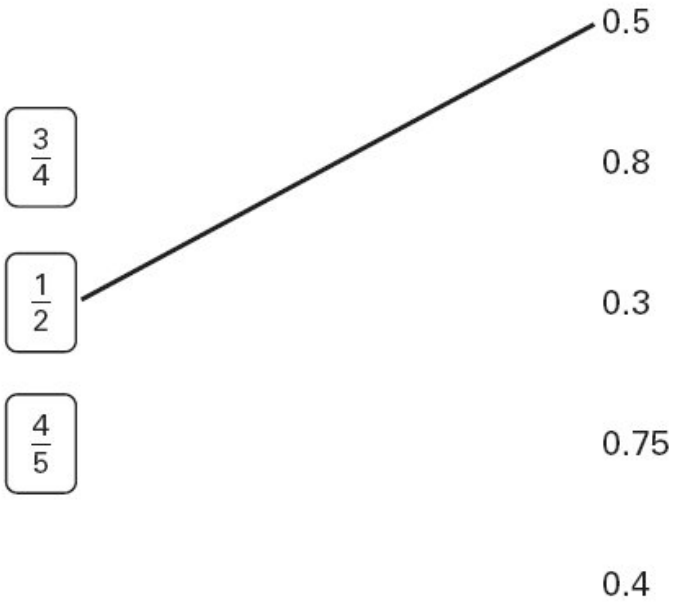
Join each fraction to the correct decimal card.

The first one has been done for you.



Match each box to the number which has the same value.

One has been done for you.



Match each fraction to its correct percentage equivalent.

$\frac{12}{50}$	12%
	16%
$\frac{12}{75}$	24%
	40%
$\frac{24}{40}$	60%

W2 L4 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Write these fractions as percentages and decimals.

$\frac{45}{100}$ percentage ..... %

decimal .....

$\frac{9}{10}$ percentage ..... %

decimal .....

Complete this table. Give all fractions in their simplest form.
One has been done for you.

Fraction	Decimal	Percentage
$\frac{1}{4}$	.....	.....
.....	0.5	50%
.....	.....	60%

× 100

Place these values in order from smallest to largest.

$\frac{12}{100}$ 10% 0.11 $\frac{4}{50}$

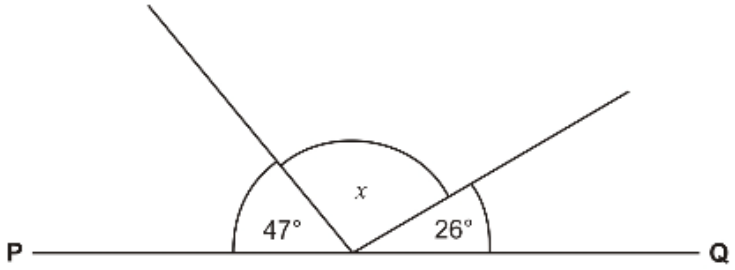
smallest → largest

Maths Week 3 Lesson 1

Workspace for video lesson

W3 L1 Sats Questions **For work in video lesson**

PQ is a straight line.



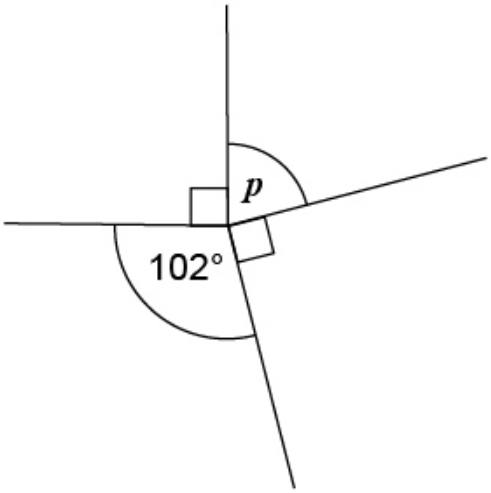
Calculate the size of angle x.

Do **not** use a protractor (angle measurer).

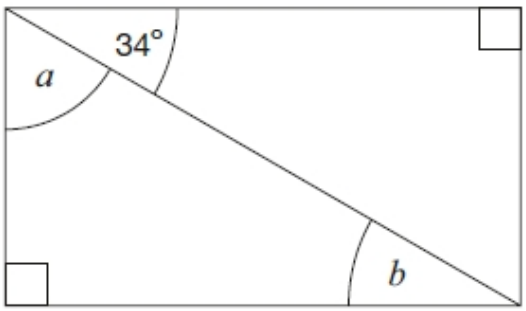
Calculate the size of angle p in the diagram.

Do not use a protractor (angle measurer).

not drawn accurately



Here is a rectangle.



Not to scale

Calculate the size of angles a and b.

Do **not** measure the angles.

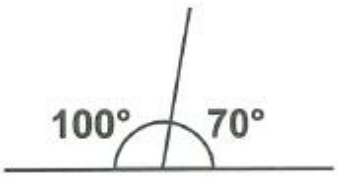
W3 L1 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Sanvi measures two angles that meet on a straight line.

She says the angles are **70°** and **100°**.

Without measuring, explain why Sanvi cannot be correct.



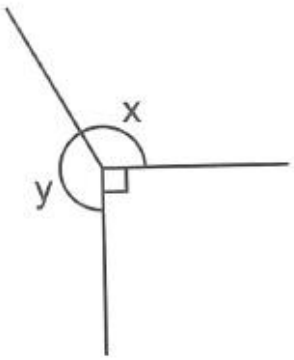
.....

.....

Callum measures angle x to be **120°**.

Work out the size of angle y without measuring.

Show your working in the box.



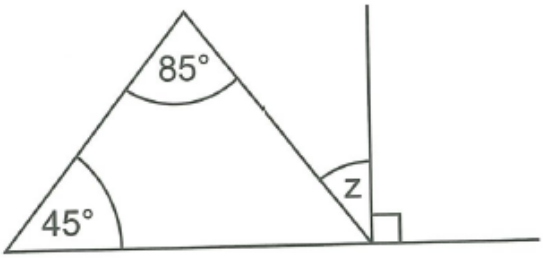
$y =$ ..... °

Look at this diagram.

It is not to scale.

Work out the value of angle z.

Show your working in the box.



$z =$ ..... °

Maths Week 3 Lesson 2

Workspace for video lesson

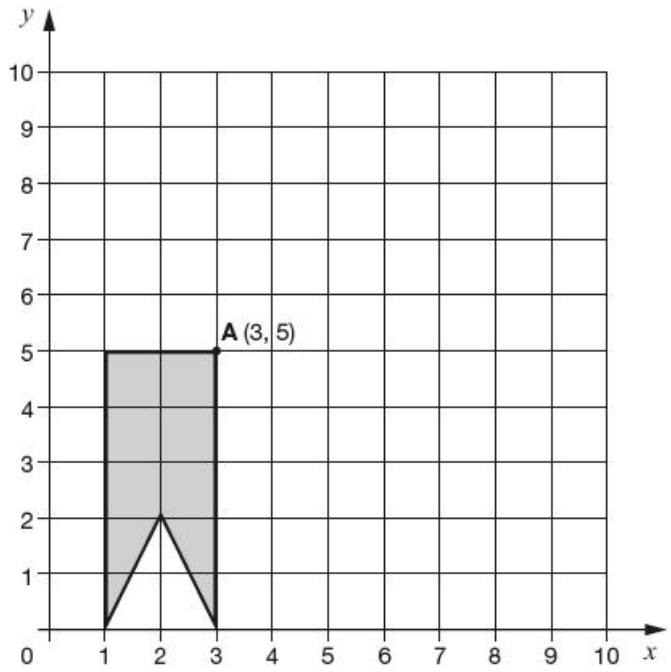
W3 L2 Sats Questions **For work in video lesson**

Here is a shape on a grid.

The shape is translated so that point **A** moves to (7, 8).

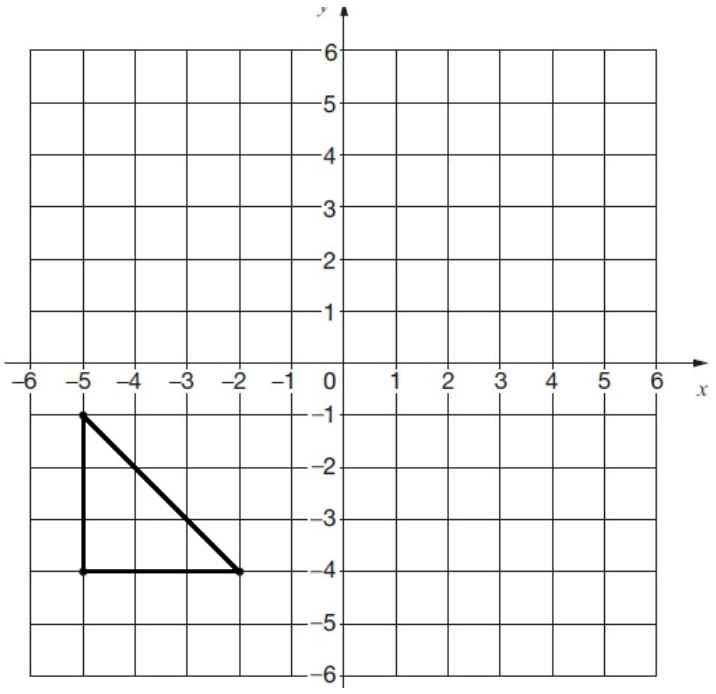
Draw the shape in its new position.

Use a ruler.



The triangle is translated **7 right** and **5 up**.

Draw the triangle in its new position.

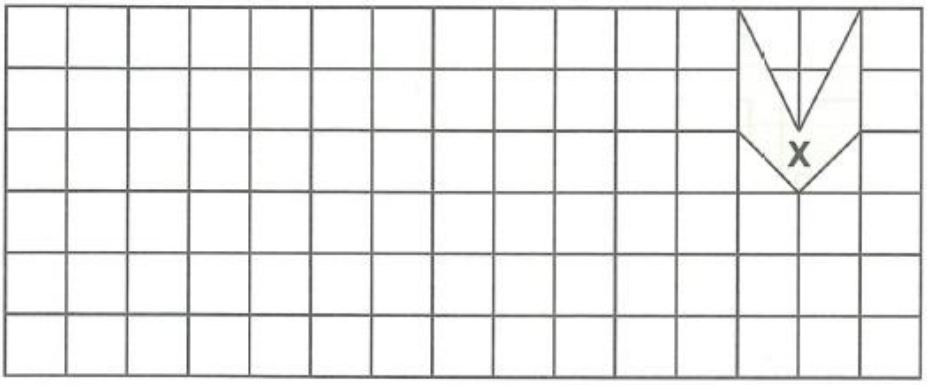


W3 L2 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Shape **X** is translated **9** squares to the left and **2** squares down.

Draw the new position of Shape **X**, and label it **Y**.

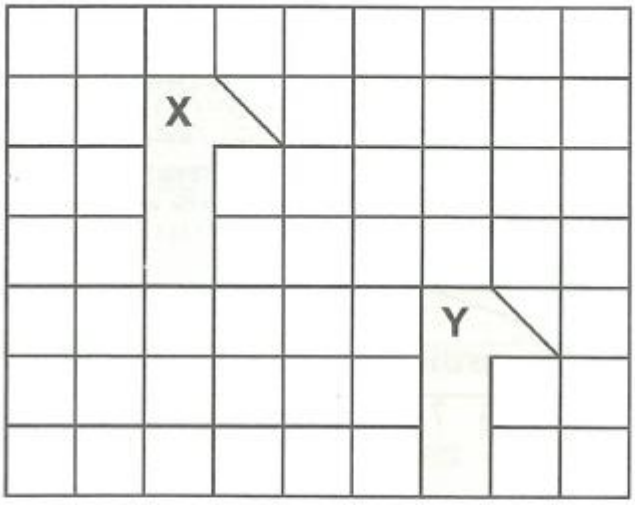


Shape **Y** is translated **5** squares to the right and **1** square down.

Draw the new position of Shape **Y** and label it **Z**.

How would you translate Shape **X** straight to the position of Shape **Z**?

Two identical shapes have been drawn on this grid.



Shape **X** is translated to the same position as shape **Y**.

Describe this translation.

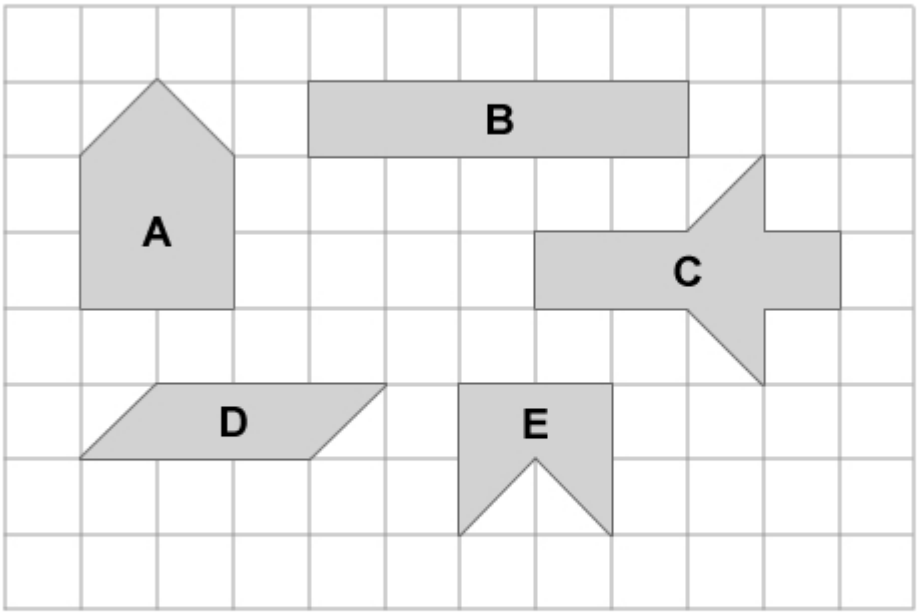
[ ] squares [ ] and [ ] squares [ ]

Maths Week 3 Lesson 3

Workspace for video lesson

W3 L3 Sats Questions **For work in video lesson**

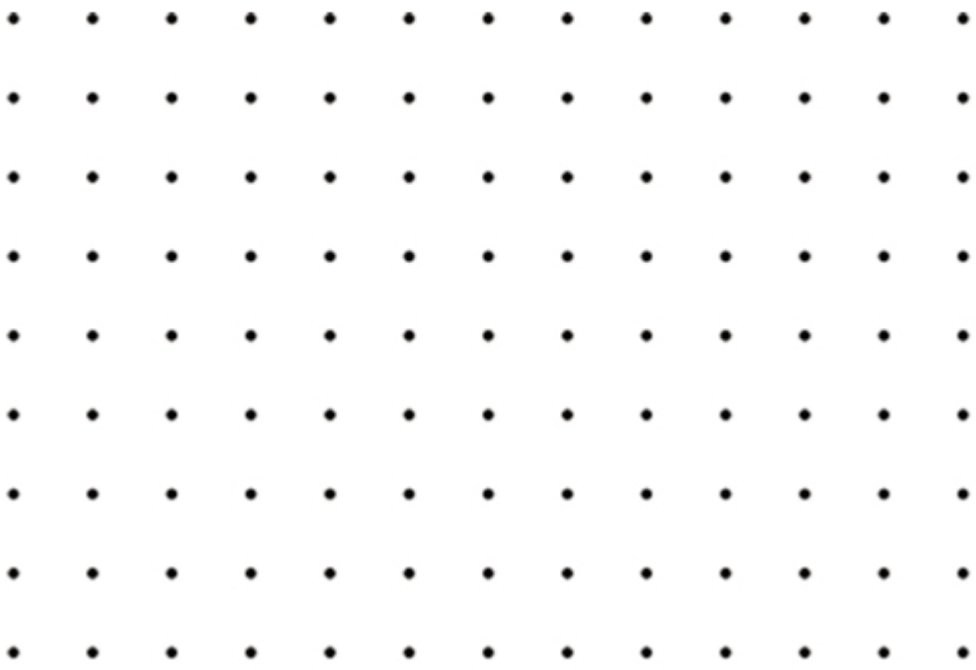
The diagram shows some shapes on a centimetre square grid.



Which two shapes have the same **area** as shape A?

☐ and ☐

Join the dots to draw a rectangle that has an **area** of 20 cm^2 and a **perimeter** of 18 cm.

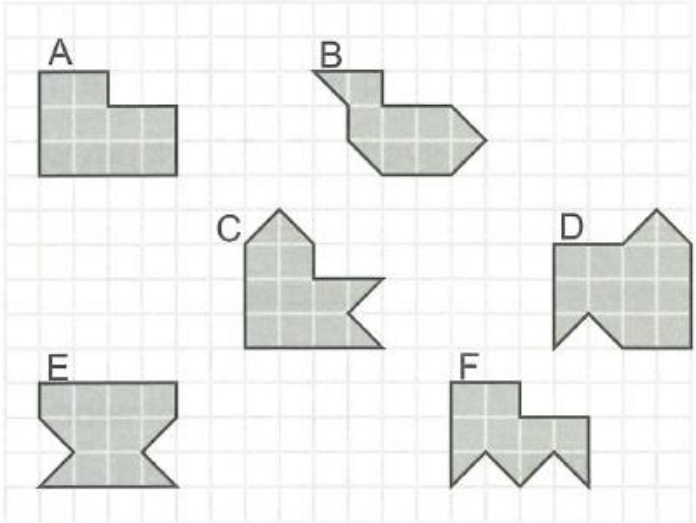


W3 L3 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

Here is a centimetre square grid. Draw a shape with an area of **15 cm²**.

These six shapes have been drawn on a grid.

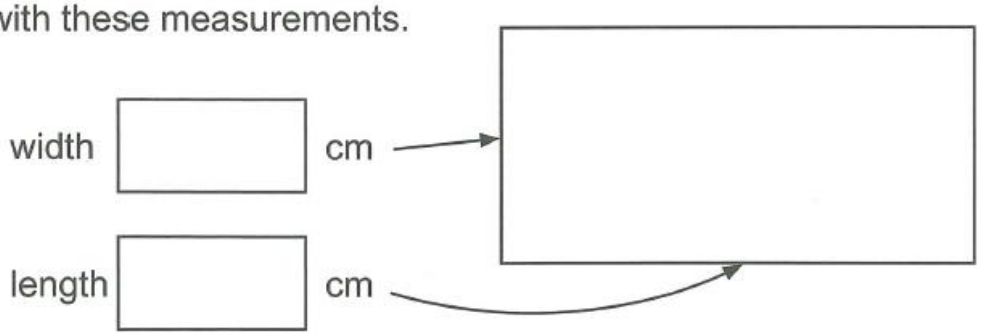


Write the letters of the three shapes that have the same area.

Here is a rectangle.

Use a ruler to accurately measure the rectangle's length and width.

Fill in the boxes with these measurements.



Work out the area of the rectangle.

Remember:
Area = width × length

Maths Week 3 Lesson 4

Workspace for video lesson

W3 L4 Sats Questions **For work in video lesson**

Seven children measured their heights.

Children	Height (cm)
Stefan	144
Lara	136
Olivia	142
Chen	143
Maria	152
Dev	148
Sarah	150

What is the mean height of the children?

Last year, Jacob went to four concerts.

Three of his tickets cost £5 each.

The other ticket cost £7

What was the **mean** cost of the tickets?

W3 L4 Independent Questions

For after the video. Answers are in the back of this booklet to self-mark.

David has five sisters. Their ages are given here:

2 4 5 9 10

Work out the **mean** of the ages. This question has been done for you.

$2 + 4 + 5 + 9 + 10 = 30$ ⇐ First, add up all the numbers...

$30 \div 5 = 6$ ⇐ ... then divide by how many numbers there are.

This will give you the mean age of David's sisters. ⇒ 6

Two groups in a class have a spelling test, marked out of 5.
These are the scores of each person in each group.

Group A:	5	4	1	5	2	3	3	2	4	1
Group B:	3	1	3	0	2	1	3	4	1	2

Work out the mean score for each group.

Group A

.....

Group B

Polly asks **five** friends their shoe size.
The mean size is **3**.
Circle the correct set of values for the five shoe sizes.

2 2 3 3 4

4 2 2 5 2

1 3 3 2 4

Maths Answers

W1 L1

Place value

Award **TWO** marks for three boxes completed correctly as shown:

Number	1,000 more
3,500	4,500
85	1,085
8,099	9,099
14,250	15,250

If the answer is incorrect, award **ONE** mark for two boxes completed correctly.

10

Award **TWO** marks for the sentences completed as shown:

25	÷ 10	=	2.5
7	÷ 100	=	0.07
3.6	× 100	=	360

Award **ONE** mark for any two sentences correct.

W1 L2

Measurement

68 (ml) **OR** 0.068 (l)

***Do not** accept incorrect units, e.g. 68 l **OR** 0.068 ml.*

Award **TWO** marks for the correct answer of 12

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg

6 litres = 6000 ml

6000 ml ÷ 500 ml

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2

All masses in the correct order, as shown.

1 kg, 800 g, $\frac{1}{2}$ kg, 60 g

W1 L3

Addition and subtraction

Award **TWO** marks for the correct answer of £6.87

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- £1.49 + £1.64 = £3.13
- £10 − £3.13 =

OR

- £10 − £1.49 = £8.51
- £8.51 − £1.64 =

OR

- £10 − 164p − 149p =

*Answer need not be obtained for the award of **ONE** mark.*
*Accept for **ONE** mark an answer of £687 **OR** £687p as evidence of an appropriate method.*

Up to 2 marks

Award **TWO** marks for the correct answer of 1,048

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 1,793 + 8,728 = 10,521
  10,521 − 9,473

OR

- 9,473 − 8,728 = 745
  1,793 − 745

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

Award **TWO** marks for numbers completed, as shown:

	5	3	2	**4**	9
+		7	4	2	**7**
	6	0	6	7	6

Award **ONE** mark for any two numbers completed correctly.

W1 L4

Multiplication and division

Award **TWO** marks for the correct answer of 75

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg:

- 30 × 50 = 1500
  1500 ÷ 20

OR

- 30 × 50p = £15
  5 20p coins make £1
  5 × 15

OR

- 50p ÷ 20p = 2.5
  30 × 2.5

*Answer need not be obtained for the award of **ONE** mark.*

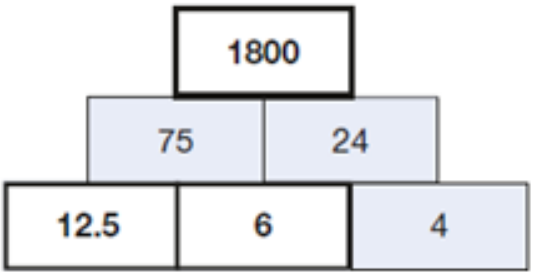
Up to 2

Award **TWO** marks for all symbols correct, as shown:

11 × 12	<	15 × 10
90 ÷ 30	=	60 ÷ 20
120 ÷ 4	>	160 ÷ 8
30 × 8	<	100 × 10

Award **ONE** mark for any three symbols correct.

Gives the three correct numbers in their correct positions, ie:



Accept unambiguous indication
Accept equivalent fractions and decimals, eg:

- *accept* $12\frac{3}{6}$ *for 12.5*

W2 L1

Multiples, Factors and Primes

5) 1 and 48, 2 and 24, 3 and 16, 4 and 12, 6 and 8 (**1 mark**)

6) 1, 5 (**1 mark**)

7) 2, 7, 17, 31 (**1 mark**)

9) 3×5 OR 5×3 (**1 mark**)
$2 \times 5 \times 7$ (numbers can be in any order) (**1 mark**)

W2 L2

Adding and Subtracting Fractions

$\frac{1}{8}$ **(1 mark)**

$9\frac{8}{9}$ **(1 mark)**

$1\frac{14}{15}$ **(1 mark)**

Multiplying and Dividing Fractions

$\frac{4}{33}$

$\frac{5}{96}$, 10

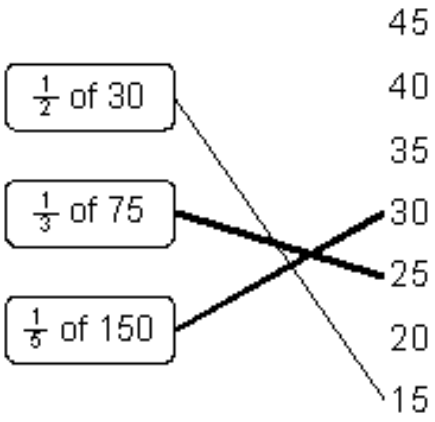
(1 mark for each correct answer)

9 balls **(1 mark)**

W2 L3

Fractions of amounts

Diagram completed correctly as shown:



157.5 **OR** 157½

630

4375

W2 L4

Decimals, Fractions and Percentages

$\frac{45}{100} = 45\% = 0.45$ **(1 mark)**

$\frac{9}{10} = 90\% = 0.9$ **(1 mark)**

Fraction	Decimal	Percentage
$\frac{1}{4}$	0.25	25%
$\frac{1}{2}$	0.5	50%
$\frac{3}{5}$	0.6	60%

(1 mark for each correct row)

$\frac{4}{50}$, 10%, 0.11, $\frac{12}{100}$ **(1 mark)**

W3 L1

Angle Calculations

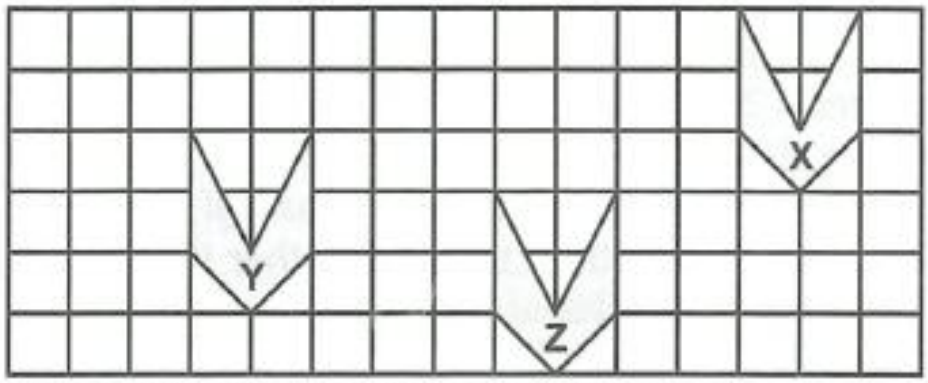
E.g. Angles on a straight line add up to 180°. (**1 mark**)

$y = 150°$ $(360° - 120° - 90°)$
(2 marks if the answer is correct. 1 mark if the answer is wrong but they've tried to subtract from 360°.)

$z = 40°$
$(180° - 45° - 85° = 50°, 180° - 90° - 50°)$
(2 marks if the answer is correct. 1 mark if the answer is wrong but they've used a sensible method.)

W3 L2

Translation and Reflection



(**1 mark for shape Y, 1 mark for shape Z**)

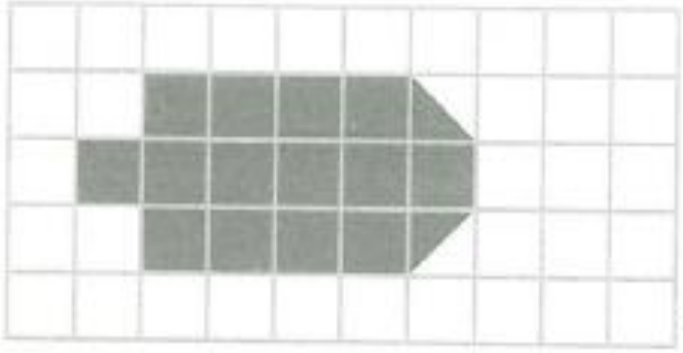
4 squares left and 3 squares down (**1 mark**)

4 squares right and 3 squares down (**1 mark**)

W3 L3

Perimeter and Area

Any shape that contains exactly 15 whole squares (including combinations of half-squares).

E.g.  **(1 mark)**

A, C, E **(1 mark)**

width 3 cm, length 6 cm **(1 mark)**

area = 18 cm^2 (3 cm × 6 cm) **(1 mark)**

W3 L4

Analysing Data

Group A: 3 (30 ÷ 10) (**1 mark**)
Group B: 2 (20 ÷ 10) (**1 mark**)

4, 2, 2, 5, 2 (**1 mark**)