



KEY STAGE 2
MATHEMATICS

SET B

PAPER 3 : REASONING



No Calculators



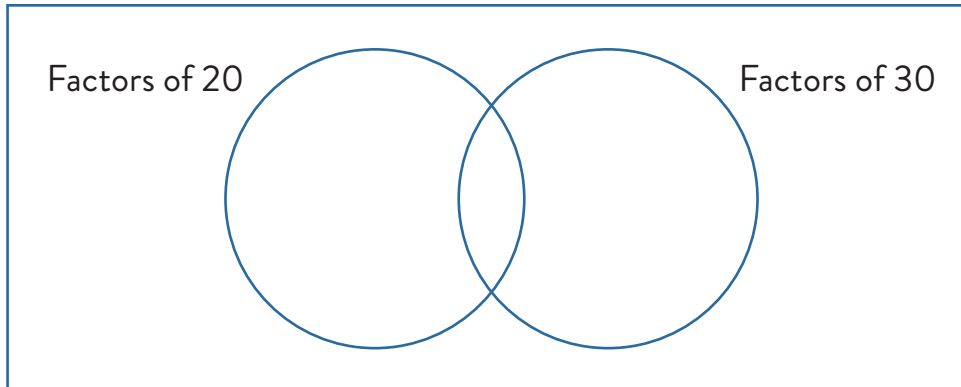
40 Minutes

First Name	
Last Name	

Total Marks	
	35

1. Place **all** of the numbers in the correct places on the Venn diagram.

3 4 5 6 7

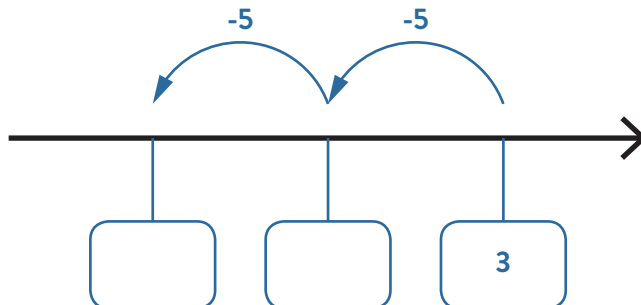


Marks

/ 2

2. Part of a number line is shown below.

Complete the number line by writing in the missing values.



/ 1

3. A shop sells scarves and gloves. The gloves are all the same price.



£3.99



£4.56



£4.28



£5.10

Bob buys a pair of gloves **and** a £3.99 scarf.

How much **change** should he receive from £20?

Show your working.



£

/ 2

Elaine buys **two** scarves **and** a pair of gloves.

What is the **least** she could pay?



£

/ 1

4. h stands for an even whole number.

$h + 8$ is **more** than 50.

$h - 8$ is **less** than 40.

Find **all** the numbers that h could be.

Show your working.



/ 2

5. Write the number 59,002 in **words**.



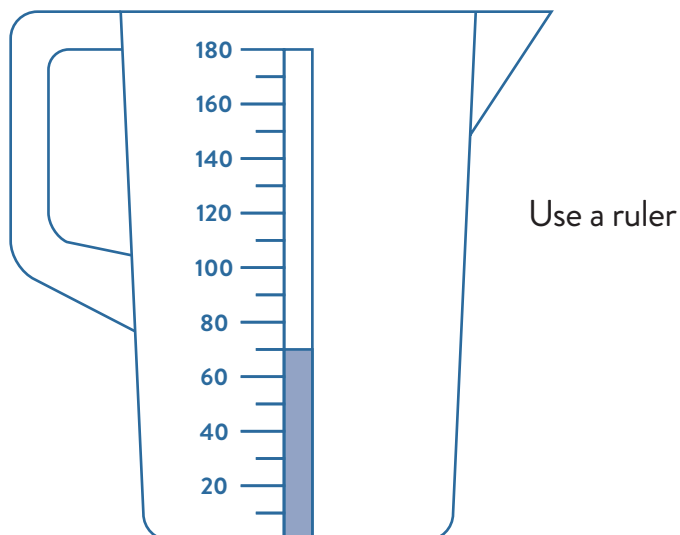
Marks

/1

6. Aisha has 70ml of orange juice in her measuring jug.

She pours another 75ml into the jug.

Draw an **arrow** on the diagram to show the new orange juice level.



/1

7. 14 centimetres can be expressed as 0.14 metres.

What is 12g expressed in kilogrammes?

 kg

/1

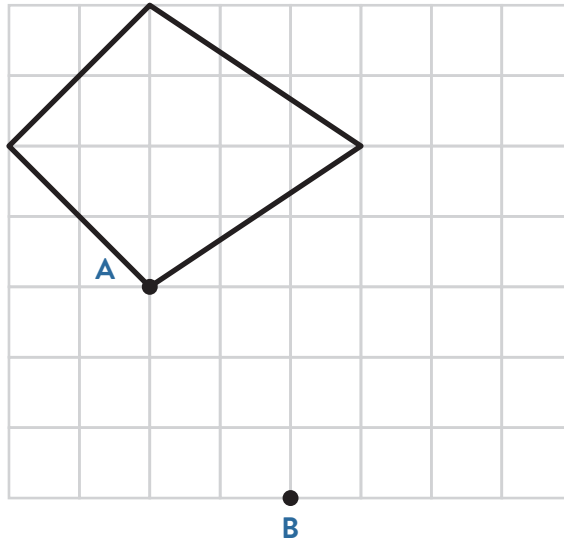
What is 0.75 m expressed in centimetres?

 cm

/1

8. The quadrilateral on the grid below is **translated** so that point A moves to point B.

Draw the quadrilateral in its new position.

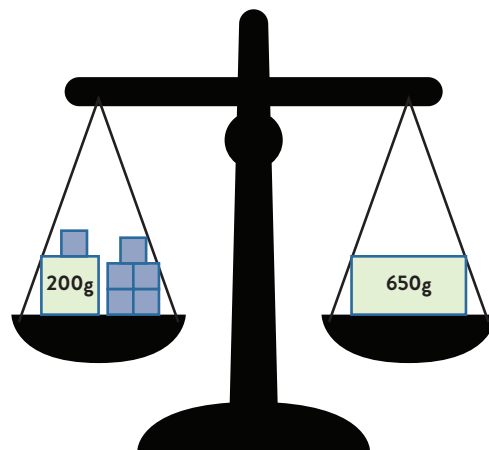


Use a ruler

Marks

/1

9. Paul has six **identical** blue boxes. He balances them on the scales with two weights. **How much** does each blue box weigh?



Show your working.


 g

/2

10. Use **all** of the numbers **once** to complete the number story.

6 7 12 90



There are sweets in a bag.

friends share them equally.

Each friend gets sweets.

There are sweets left over.

Marks

/1

11. Write the missing digits in the boxes to make this addition sum correct.



$$\begin{array}{r}
 \boxed{}4\boxed{} \\
 9\boxed{}8 \\
 + 475 \\
 \hline
 \boxed{}389
 \end{array}$$

/2

12. Here are four number cards.

8

4

2

3

Using each number card **once**, make the decimal number that's closest to 30.

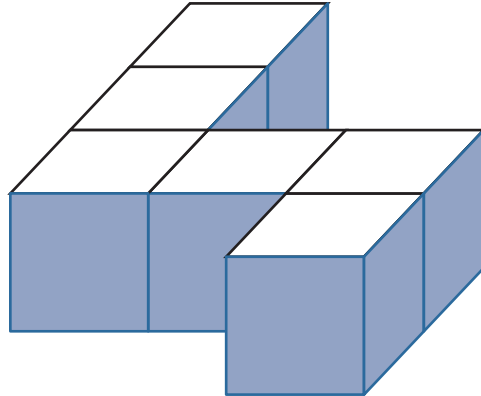


.

/1



13. Barbara has six cubes. She sticks them together to make the model shown below:



She paints the sides of the model blue all the way round.
She leaves the top and bottom of the model white.

How many of the cubes in the model have exactly **two** faces painted blue?



cubes

/ 1

14. Marcia the hen lays a certain number of eggs in the first week of May.
In the second week Marcia lays twice as many.
In the third week, Marcia lays only six eggs.

The total number of eggs laid by Marcia during the three weeks was 30.

How many eggs did Marcia lay in the **first** week of May?

Show your working.

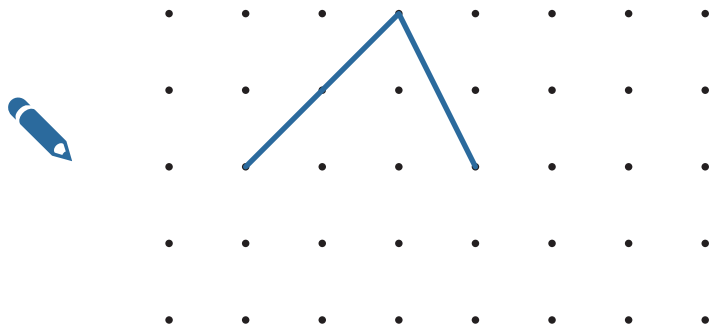


eggs

/ 2

15. Two sides of a **pentagon** have been drawn below.

Complete the pentagon so that it contains four **obtuse** angles.



Marks

/1

16. Andrew thinks of a number.

He adds 50 and then halves the result. He then subtracts 20.
The final result is 28.

What was the **original** number that Andrew thought about?

Show your working.



/2

17. 5% of a certain number is 35.

What would 10% of the number be?



/1

What was the number?



/1

18. The recipe for Banoffee Pudding to serve 12 helpings is:

Recipe

100g butter

360g condensed milk

4 bananas

300ml whipping cream

Greta wants to make enough Banoffee Pudding to serve **five** helpings.

How much whipping cream should she use?

Show your working.

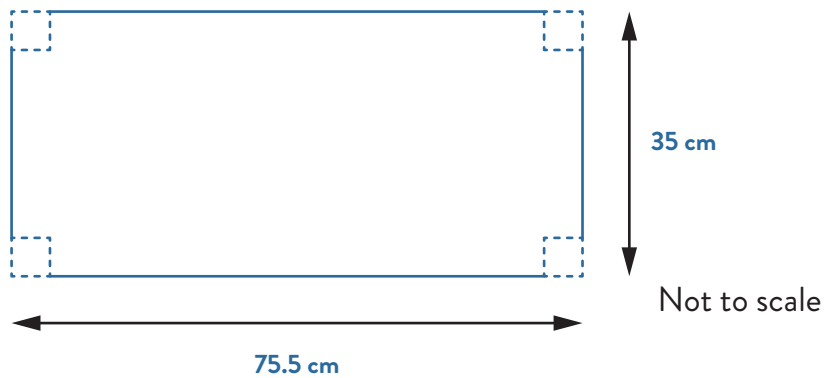
 ml

/2

19. Ali is making a metal tray.

He has a sheet of metal that measures 75.5cm by 35cm.

He **removes** a 3cm by 3cm square from each corner.



What **area** of metal does Ali have left?

Show your working.

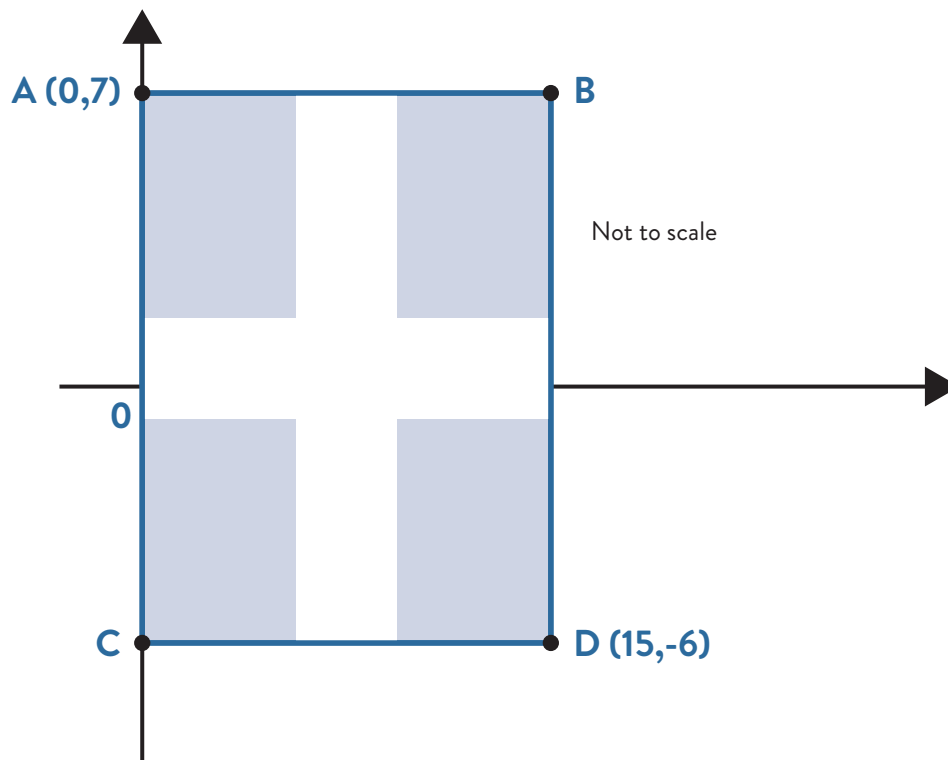


cm²

/ 3

20. A rectangular flag is drawn on coordinate axes below:

Marks



Write the coordinates of the other corners B and C.



B =

(,)

/1



C =

(,)

/1

What are the coordinates at the **centre** of the flag?



Centre =

(,)

/1

END OF TEST

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