

Year 8

Mathematics

Foundation: No calculator allowed

Time allowed: 45 minutes

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
Teacher						

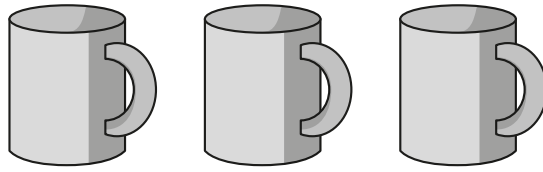
This assessment has been designed by White Rose Maths.

For more information, please visit www.whiterosemaths.com



1

3 mugs cost £12



What is the cost of 1 mug?

£

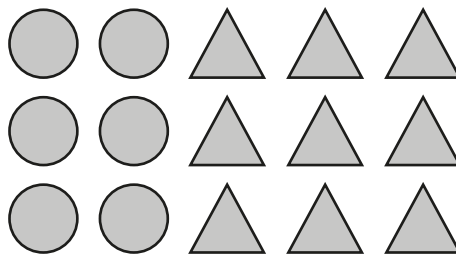
1 mark

What is the cost of 5 mugs?

£

1 mark

2

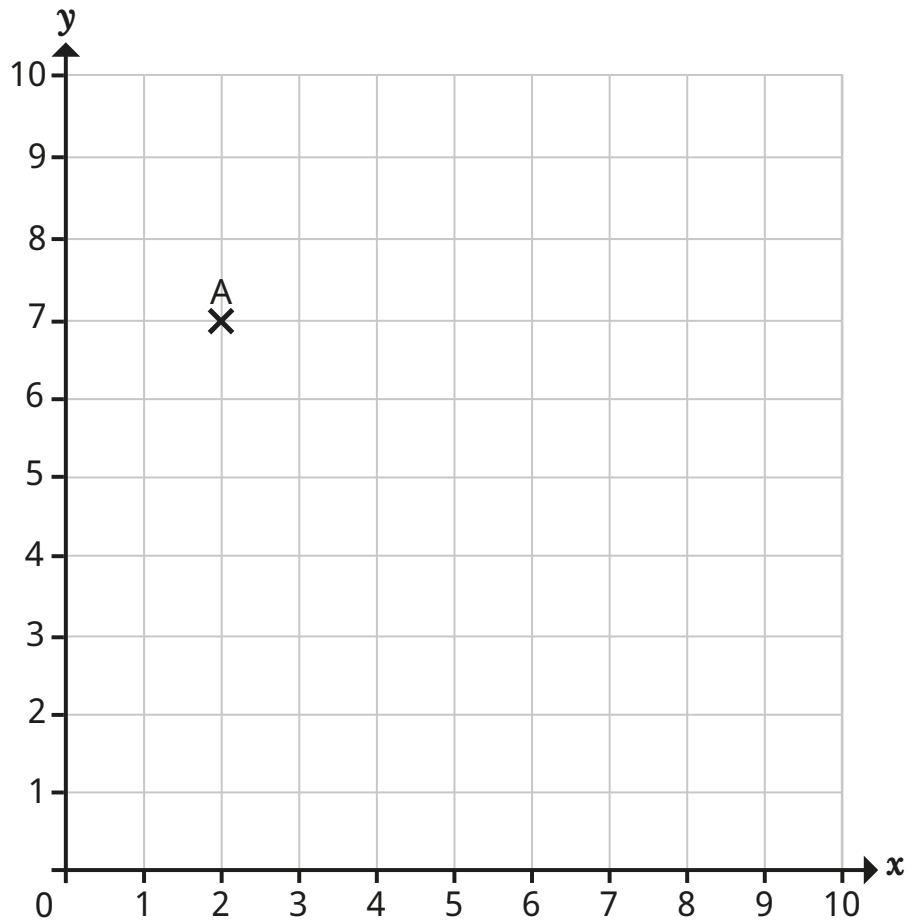


What is the ratio of circles to triangles?

Write your answer in its simplest form.

:

2 marks



Write the coordinates of point A.

(,)

1 mark

Plot the point (5, 0) on the grid.

1 mark

4

£1 = 2 dollars

Rosie changes £30 to dollars (\$).

How many dollars (\$) does she get?

\$

1 mark

Jack changes 30 dollars to pounds (£).

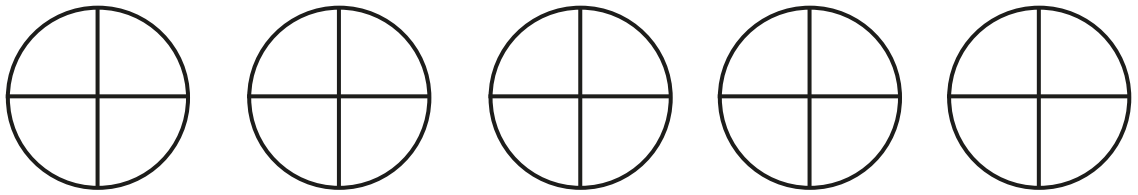
How many pounds (£) does he get?

£

1 mark

5

How many quarters are there in 5?



1 mark

What is $5 \div \frac{1}{4}$?

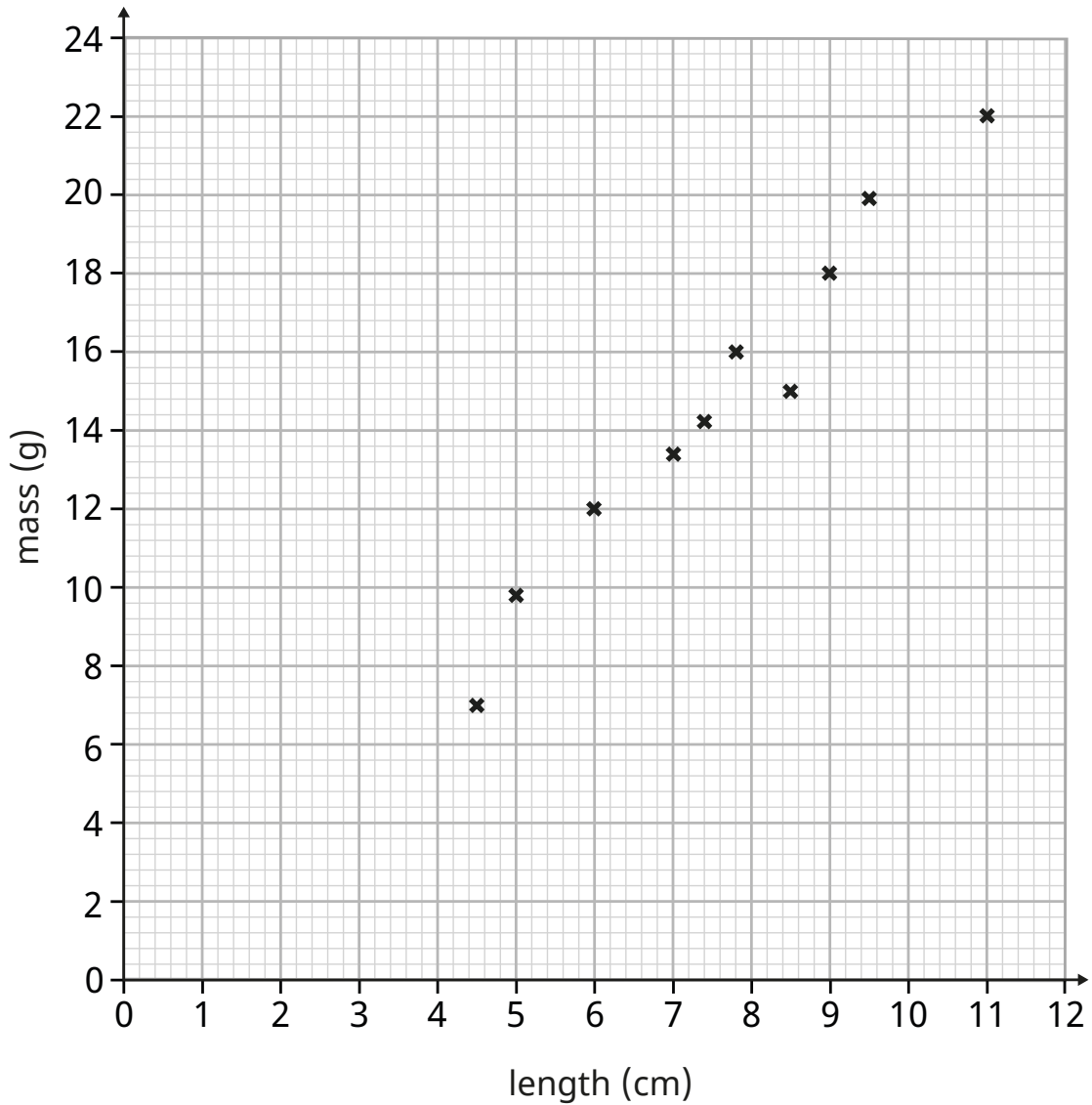
1 mark

What is $3 \div \frac{1}{5}$?

1 mark

6

The scatter graph shows the length and mass of ten mice.



What is the length of the mouse with a mass of 18 g?

cm

What type of correlation does the scatter graph show?



1 mark

Draw the line of best fit on the scatter graph.

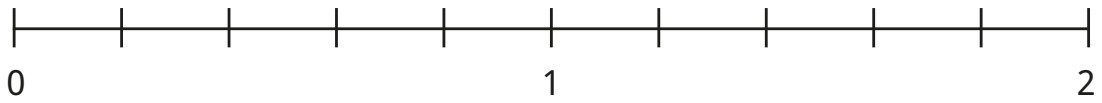
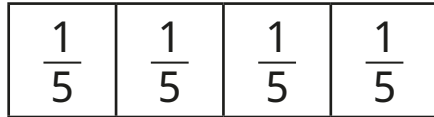
1 mark

Another mouse is 10 cm long.

Estimate the mass of the mouse.

2 marks

7



You may use the diagram to help you with these questions.

Work out $4 \times \frac{1}{5}$

1 mark

Work out $7 \times \frac{1}{5}$

Write your answer as a mixed number.

2 marks

Work out the missing number.

$$\boxed{} \times \frac{1}{5} = 2$$

1 mark

8

The table shows the number of red, blue and yellow counters in a bag.

Colour	Number of counters
red	20
blue	15
yellow	5

A counter is removed from the bag.

Which colour counter is most likely to be removed?

1 mark

What is the probability of removing a blue counter?

Give your answer as a fraction in its simplest form.

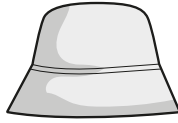
2 marks

9

Annie has a choice of five hats.



A



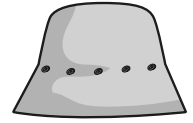
B



C

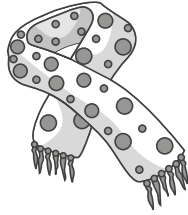


D



E

She also has two scarfs.



1



2

Annie chooses a hat and a scarf.

Complete the table to show all the possible different combinations of hat and scarf.

The first two have been done for you.

Hat	Scarf
A	1
A	2

$$\frac{1}{4} \times \frac{1}{3} = \boxed{}$$

1 mark

$$\frac{2}{5} \times \frac{3}{7} = \boxed{}$$

1 mark

$$\frac{7}{10} \times \boxed{} = \frac{7}{20}$$

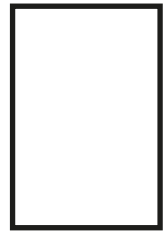
1 mark

11

The diagram shows a rectangle divided into five equal sections. One of the sections has been shaded.



What fraction of the rectangle is shaded?



1 mark

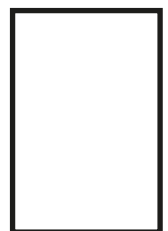
What is the ratio of shaded to unshaded sections?



1 mark

Whitney shades a different rectangle such that the ratio of shaded to unshaded sections is 4 : 3

What fraction of this rectangle is shaded?



2 marks

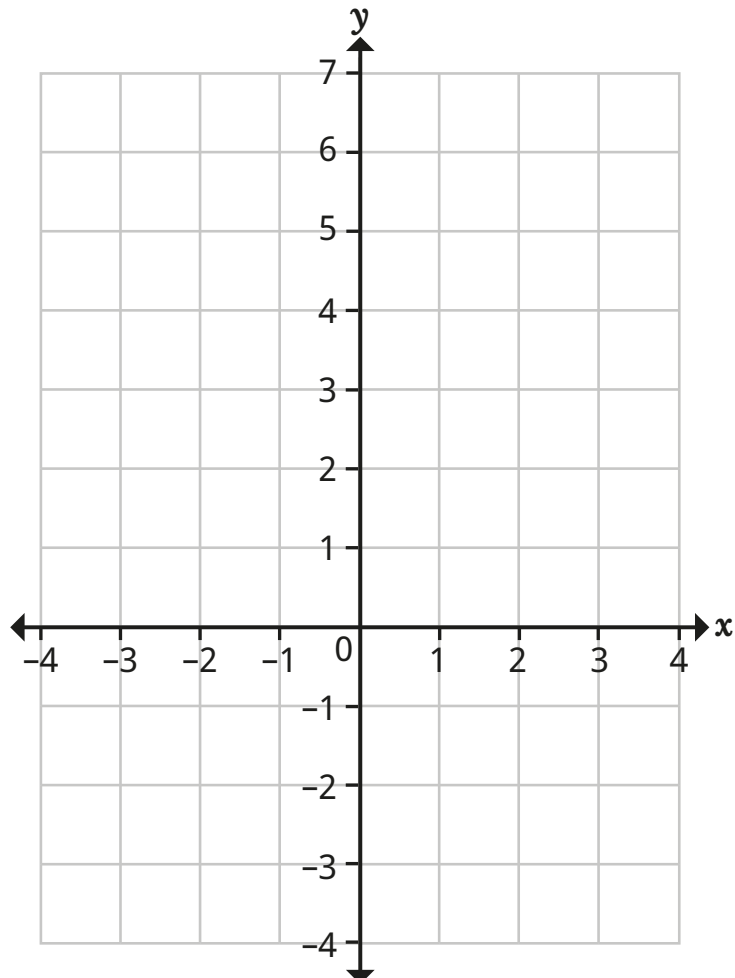
12

Complete the table for the graph of $y = x + 2$ for values of x from -2 to 3

x	-2	-1	0	1	2	3
y	0	1		3		5

1 mark

On the grid, draw the graph of $y = x + 2$



2 marks

13

Here is a list of ingredients for making 12 cupcakes.

110 g butter
110 g sugar
2 eggs
 $\frac{1}{2}$ teaspoon vanilla extract
130 g flour

Mo is going to make 36 cupcakes.

How much flour will he need?

g

2 marks

Kim is going to make 18 cupcakes.

How much butter will she need?

g

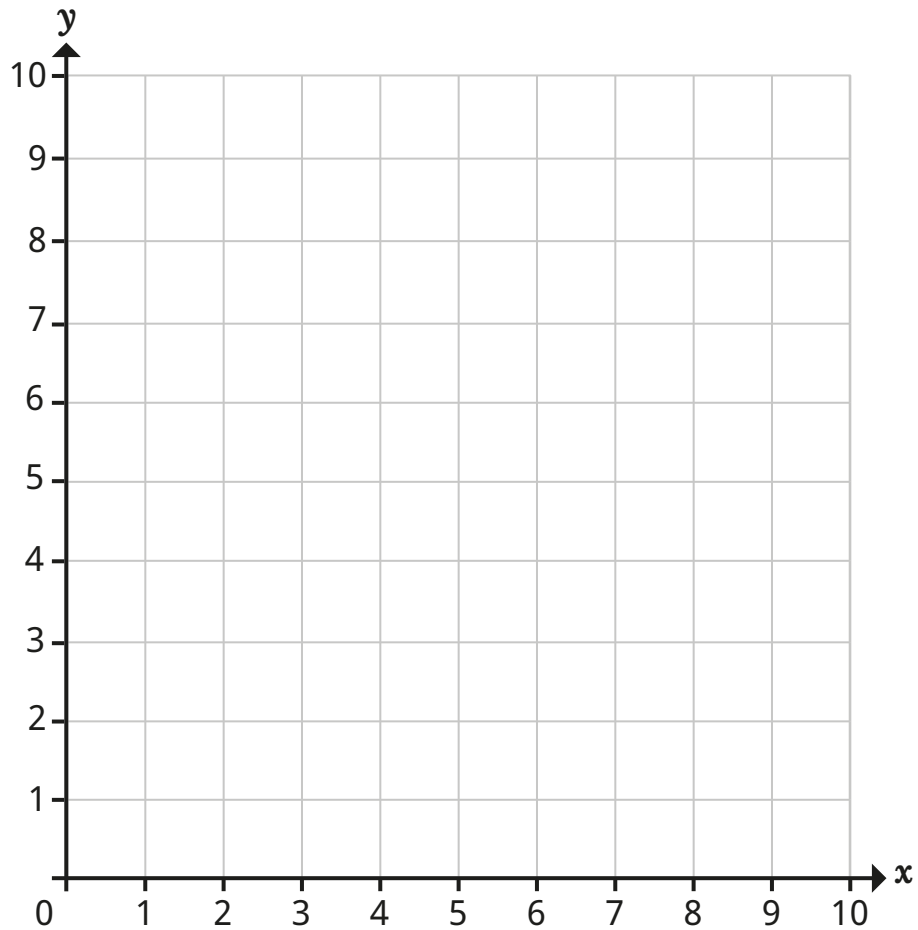
2 marks

14

(3, 5) and (5, 9) are the coordinates of two vertices of a right-angled triangle.

What could the coordinates of the other vertex be?

You may use the grid to help you.



1 mark

END OF TEST

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