

Spring progress check

Year 5

Mathematics

Paper 2: reasoning and problem solving

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

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Instructions

You **may not** use a calculator to answer any questions in this paper.

Questions and answers

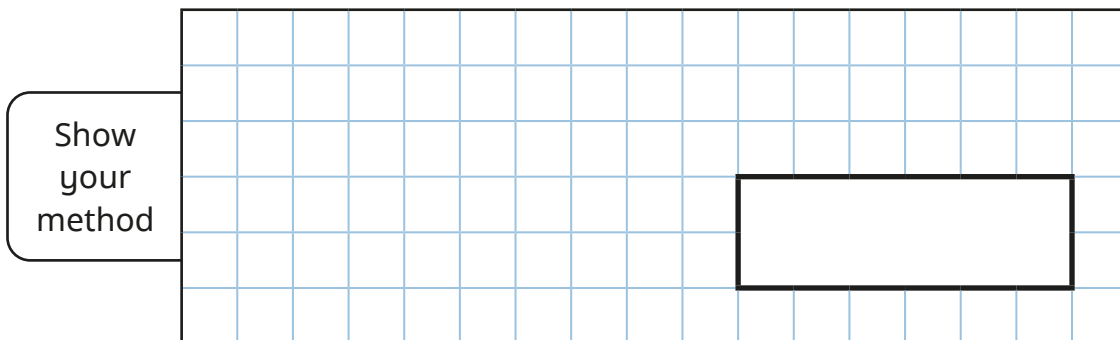
You have **50 minutes** to complete this paper.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use the space around the question.

Some questions have a method box like this:



For these questions you may get a mark for showing your method.

If you cannot do one of the questions, **go on to the next one.**

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work.**

Marks

The number under each line at the side of the page tells you the maximum number of marks for each question.

1

Max has **4** boxes of apples.

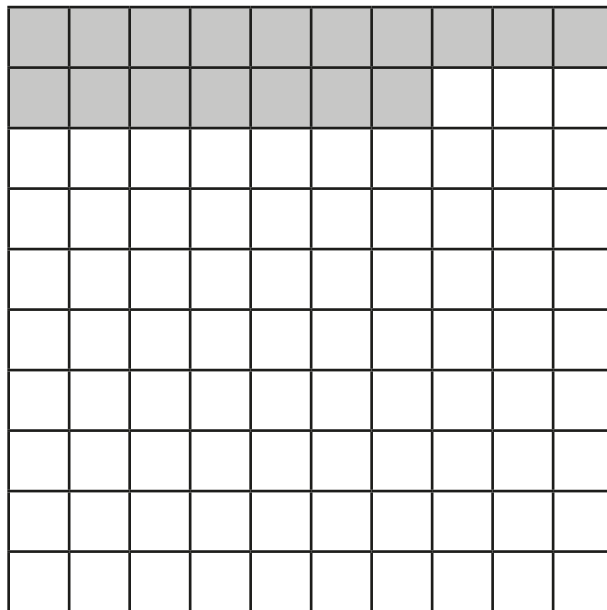
Each box has **30** apples.

How many apples does Max have in total?

1 mark

2

What percentage of the hundred square is shaded?



%

1 mark

3

The place value chart shows 4.23

Tens	Ones	Tenths	Hundredths
	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">1</div> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">1</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">1</div> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">1</div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">0.1</div> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">0.1</div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">0.01</div> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">0.01</div> <div style="border: 1px solid gray; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">0.01</div> </div>

Complete the number sentences.

$$4.23 = 4 + 0.2 + \boxed{}$$

1 mark

$$4.23 = 3 + \boxed{} + 0.03$$

1 mark

4

The product of two numbers is 84

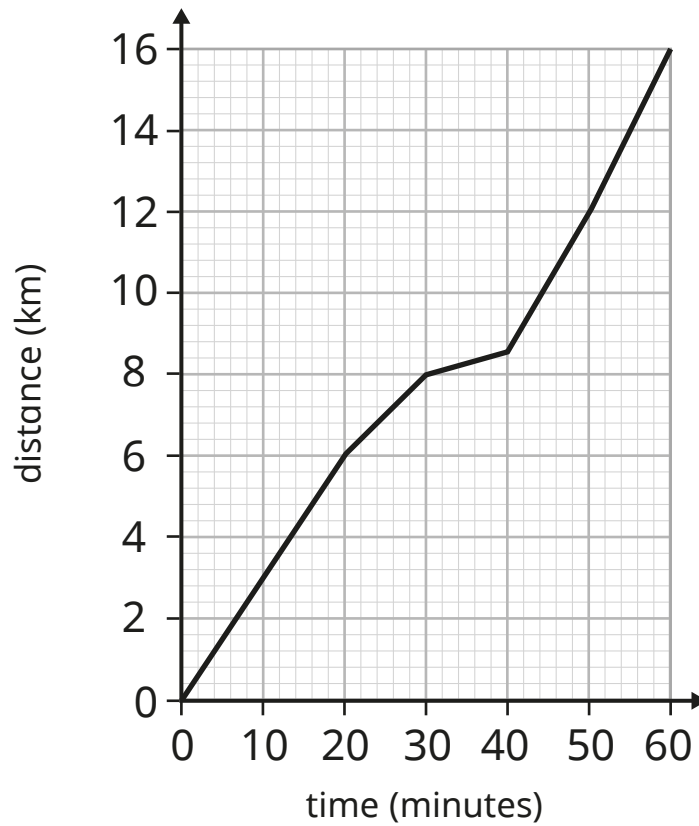
One of the numbers is 6

Work out the other number.

1 mark

5

The graph shows the distance Eva travels on a bike ride.



How long does it take Eva to cycle 12 km?

minutes

1 mark

Estimate how far Eva has cycled after 20 minutes.

km

1 mark

6

Round 5.6 to the nearest whole number.

1 mark

Round 16.49 to 1 decimal place.

1 mark**7**

Complete the table.

Fraction	Decimal	Percentage
$\frac{7}{10}$	0.7	%
$\frac{9}{100}$		%

2 marks

8

Adult tickets for the zoo cost £12

The total cost of tickets for 3 adults and 4 children is £56

Work out the cost of **one** child ticket.

Show
your
method

£

2 marks

9

Dexter has £54

He spends $\frac{1}{3}$ of his money on a jumper.

How much money does he have **left**?

Show
your
method

£

2 marks

10

Write the numbers from smallest to greatest.

9.004

9.4

9.44

9.04

1 mark**11**

Find the missing digit.

		2	<input type="text"/>	6	3	
	x				3	
		7	3	8	9	
		1	1			

1 mark

12

Is the statement true or false?

$$\frac{40}{100} > 0.4$$

Circle your answer.

True

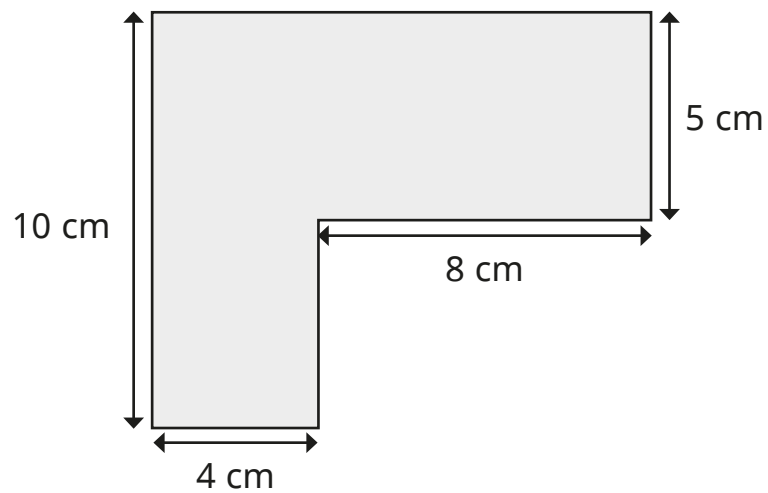
False

Explain how you know.

1 mark

13

Work out the perimeter of the shape.



cm

2 marks

14

Rosie is making bracelets.
Each bracelet has 9 beads.
She has 147 beads.

How many bracelets can Rosie make?

1 mark

How many beads will Rosie have left over?

1 mark

15

Amir's cat eats $3\frac{1}{2}$ tins of food every two days.

How many tins does the cat eat in 12 days?

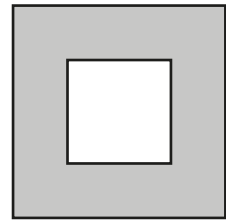
Show
your
method

The grid is 12 units wide and 10 units high. A smaller empty box is located in the bottom right corner of the grid, measuring 4 units wide and 2 units high.

2 marks

16

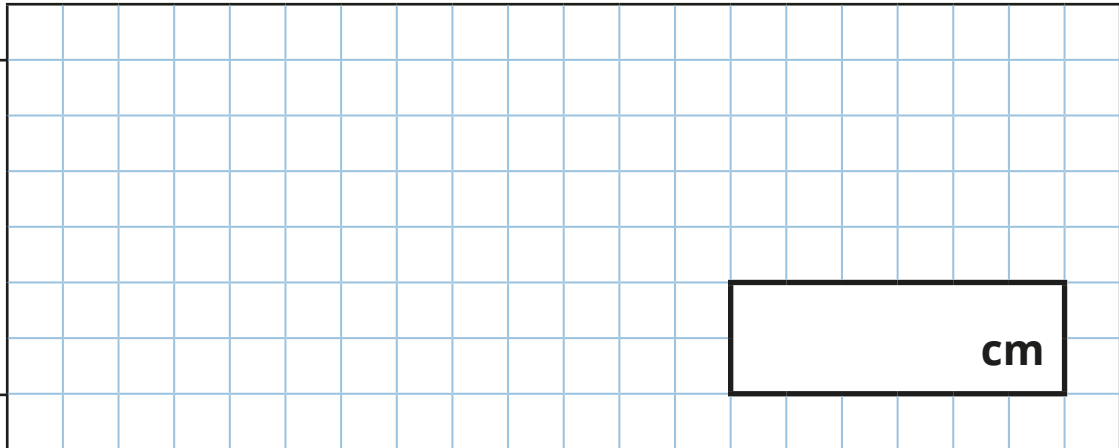
Max has a square piece of paper.
He cuts a square of side length 4 cm from
the paper.



The area of the remaining paper is 65 cm^2

What is the length of the piece of paper?

Show
your
method



2 marks

17

Sam is given some money for her birthday.

She spends $\frac{2}{5}$ of the money on a coat.

The coat costs £50

How much money did Sam get for her birthday?

Show
your
method

£

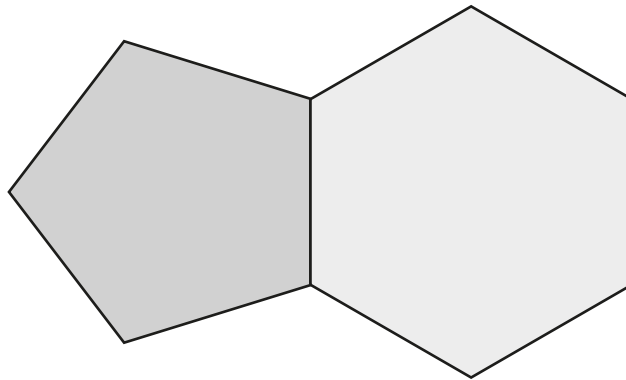
2 marks

18

Jack makes a shape using a regular pentagon and a regular hexagon.

The perimeter of the pentagon is 35 cm.

What is the perimeter of Jack's shape?



Show
your
method

cm

2 marks

END OF PAPER

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