

Progress check

# Year 3

## Mathematics

### Paper 2: reasoning and problem solving

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

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For more information, please visit [www.whiterosemathshub.co.uk](http://www.whiterosemathshub.co.uk)

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# Instructions

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

## Questions and answers

You have **35 minutes** to complete this test.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

For this assessment you will require a ruler.

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

**Some questions have a method box like this:**

Show your method

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.

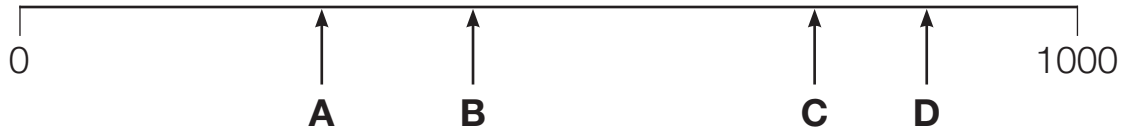
If you finish before the end, **go back and check your work.**

## Marks

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

1

Here is a number line from 0 to 1000

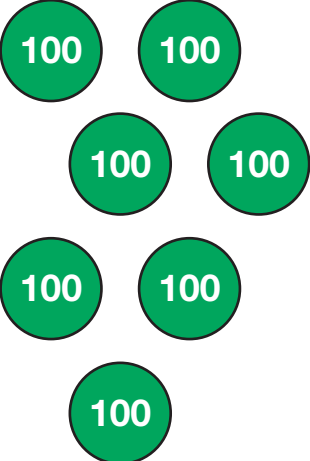

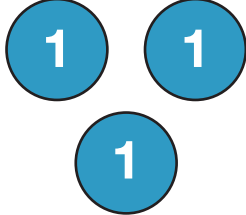


Write down the letter that is closest to 430

1 mark

2

Jake is using counters and a place value grid to represent a number.

100s	10s	1s
		

What is Jake's number?

1 mark

Write this number in words.

1 mark

Jake adds this counter to his grid



What is Jake's new number?

1 mark

**3**

Complete the missing value.

$$542 = 500 + \boxed{\phantom{000}} + 2$$

1 mark

**4**

Draw a line that is 12cm long.

1 mark

Another line is 90mm long.

Is this line shorter or longer than the line you have drawn?

Circle your answer.

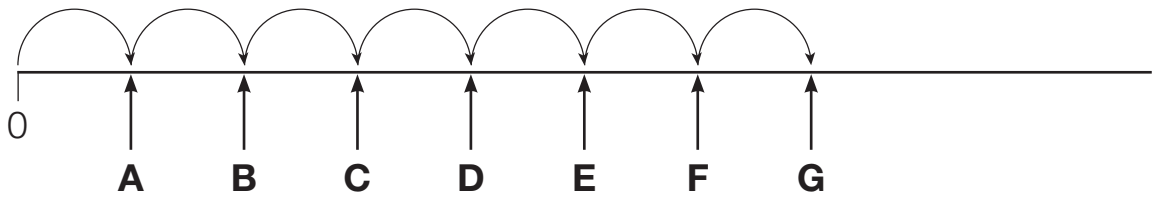
**Shorter****Longer****Explain why.**

1 mark



7

Hannah is counting on a number line from 0 in equal jumps.



A is 50

Which letter represents 300?

1 mark

8

Fill in the boxes to make the calculation correct.

$$\begin{array}{r} \square 37 \\ + 42\square \\ \hline 7\square 1 \end{array}$$

2 marks

**9**

Here is a number sentence.

$$127 + 40 = 167$$

Complete the number sentences below.

$40 + 127 =$

$167 - 40 =$

$167 - 127 =$

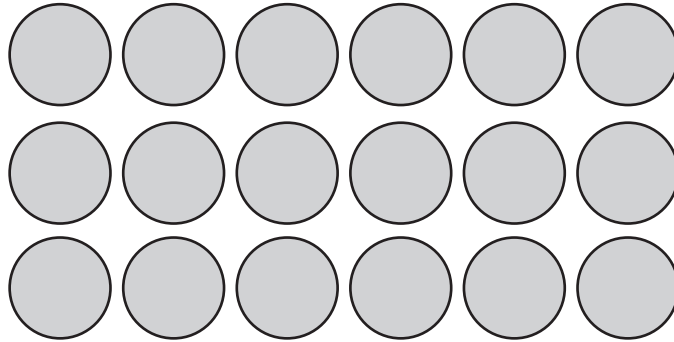
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1 mark



**12**

Here is an array of counters.

**Use the array** to complete the mathematical statements.

$$\square \times 6 = \square$$

$$6 \times \square = \square$$

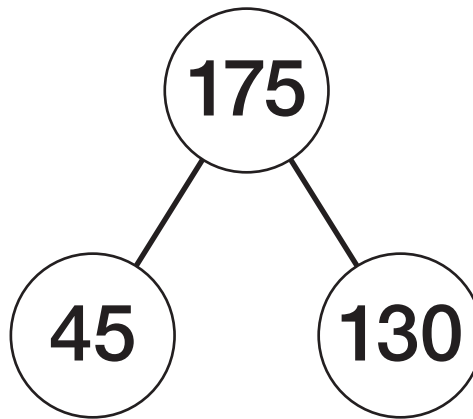
$$\square \div 6 = \square$$

$$\square \div \square = 6$$

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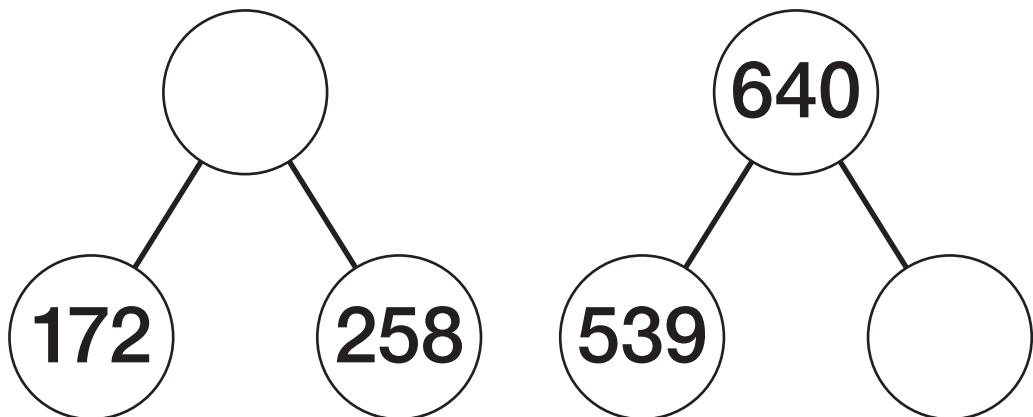
2 marks

Here is a part – whole diagram.

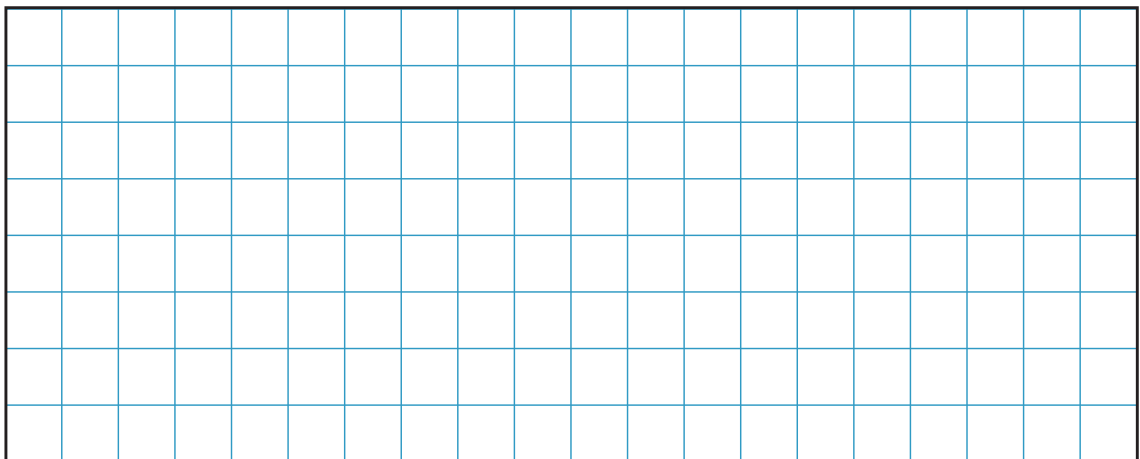


The two numbers in the bottom circles add to make the number in the top circle.

Complete the missing values in the following diagrams.



You may use the space below for your calculations.



2 marks

**14**

Tick (✓) which of the statements below are true.

$$8 \times 5 = 8 + 8 + 8 + 8 + 8$$

$$8 \times 5 = 16 + 8 + 8 + 8$$

$$8 \times 5 = 16 + 16 + 8$$

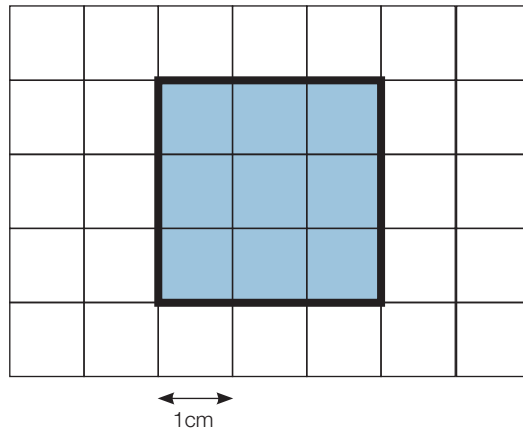
$$8 \times 5 = 40$$

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2 marks

15

Here is a square drawn on a centimetre square grid.



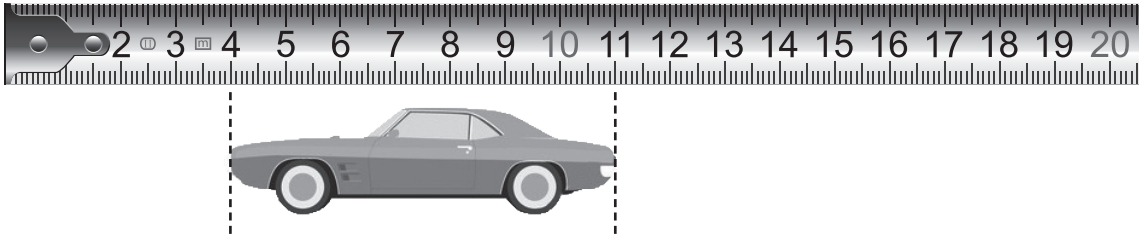
Work out the **perimeter** of the square.

  
cm

1 mark

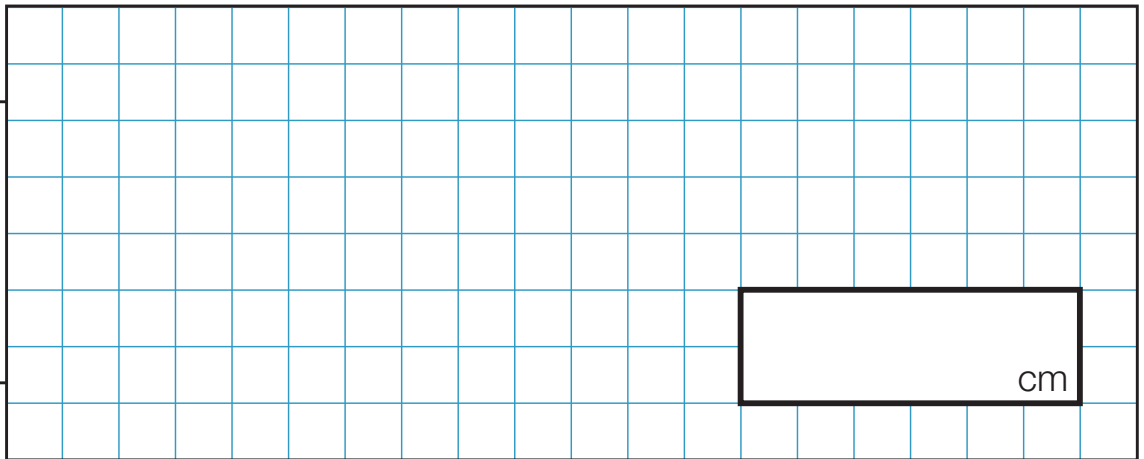
16

Here is a toy car.



How long would 5 of these toy cars be?

Show  
your  
method



2 marks

17

Jamil and Beth have 180 sweets.

Jamil has 80 more sweets than Beth.

How many sweets does Jamil have?

Show  
your  
method

The grid is 20 units wide and 15 units high. A small empty rectangular box is located in the bottom right corner of the grid, spanning 4 units wide and 2 units high.

2 marks

Four children are given a card with a number on.

464

46

404

446

They each say a fact about their number.

Leon says: "My number has 4 hundreds in it."

Marco says: "My number has no tens."

Kira says: "My number has a 4 in the tens column."

James says: "Mine is a 2 digit number."

Work out who has which number.

Leon has

Marco has

Kira has

James has

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2 marks

**END OF TEST**

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