Progress check



# Mathematics

Paper 2: reasoning and problem solving

First name				
Middle name				
Last name				
Date of birth	Day	Month	Year	
Teacher			1	

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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.

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.





2

1

Here is a patio made of square tiles.

The area of each tile is 1 m<sup>2</sup>.



What is the area of the patio?



1 mark



3 There are 10 sheets of stickers in a pack.
Each sheet has the same number of stickers.
There are 160 stickers altogether in a pack.
How many stickers are on each sheet?

1 mark

4

Complete the boxes.







1 mark



Jemima has £352

Henry has £1,000 more than Jemima.

How much money do they have altogether?



1 mark





2 marks

#### 8

Complete the table.

Fraction	Decimal
<u>3</u> 10	
<u>3</u> 100	
<u>3</u> 4	

2 marks



#### Sarah makes three 4-digit numbers.



Use the letters A, B and C to complete the boxes.



1 mark



Tom is planting seeds.

He plants 18 rows with 7 seeds in each row.

 $\frac{1}{3}$  of the seeds are eaten by birds.

How many seeds are eaten by birds?



2 marks



#### 3 marks



### Match the calculations with the same answer.

$$\frac{3}{10} + \frac{7}{10}$$

$$\frac{2}{7} + \frac{3}{7}$$

$$\left[\frac{13}{7}-\frac{4}{7}\right]$$







2 marks



On Monday, Tony cycles 1,340 metres.

On Tuesday, he cycles 2 kilometres.

What is the difference between the distances he cycles on Monday and Tuesday?



Give your answer in metres.

2 marks



#### There are 67 adults at a disco.

There are 6 times as many children as adults.

How many people are at the disco altogether?



2 marks



Complete the number sentence.

1 mark



Jasmine is drawing a shape with an area of 8 centimetre squares.

It has a perimeter of 12 centimetres.

Complete Jasmine's shape.



1 mark



A box of chocolates contains dark, milk and white chocolates.

 $\frac{4}{15}$  of the box are white chocolate.

 $\frac{8}{15}$  of the box are milk chocolate.

6 chocolates in the box are dark chocolate.

How many chocolates are there in the box altogether?



2 marks



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