Year 5

Mathematics

Paper 2: reasoning and problem solving

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

White Rose Maths
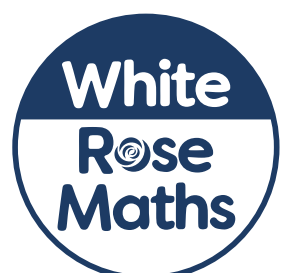
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Instructions

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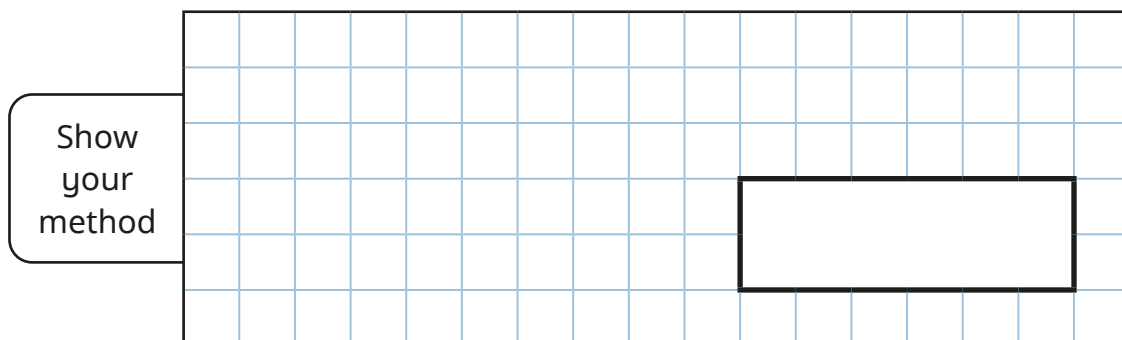
Questions and answers

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:

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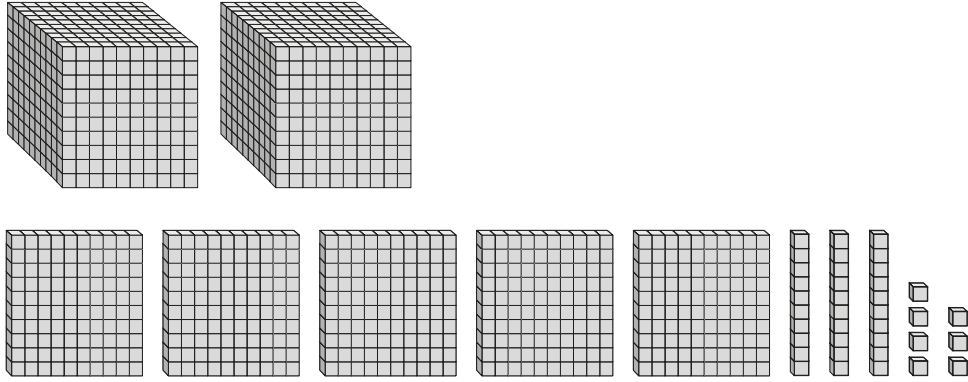
You can come back to it later, if you have time.

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 Brett makes this number.

Write Brett's number using numerals.
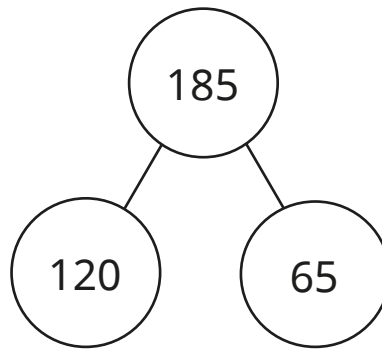
1 mark

Write Brett's number in words.

_____

_____

1 mark

2 Tick the number that is **10 times** the size of six hundred and five.

| 6,500 | 605 | 6,005 | 650 | 6,050 |

1 mark

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3 Here is a part-whole model.

Use the model to complete the sentences.

185 − ☐ = 65

120 = ☐ − ☐

4 Shade three-quarters of the shape.

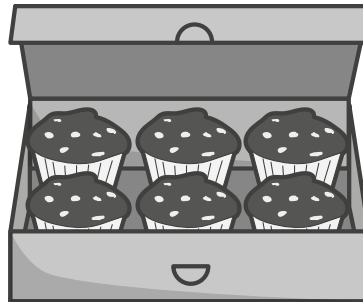|			
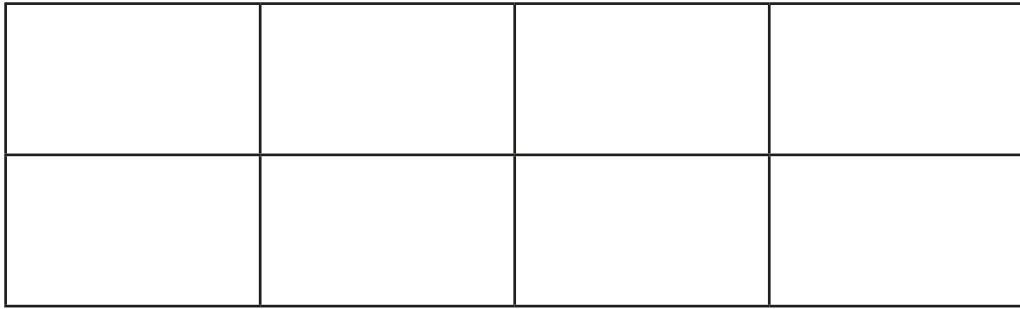
1 mark

5 Cupcakes come in boxes of 6

How many cupcakes are there in 8 boxes?

1 mark

Rosie wants to buy 72 cupcakes.

How many boxes should she buy?

1 mark

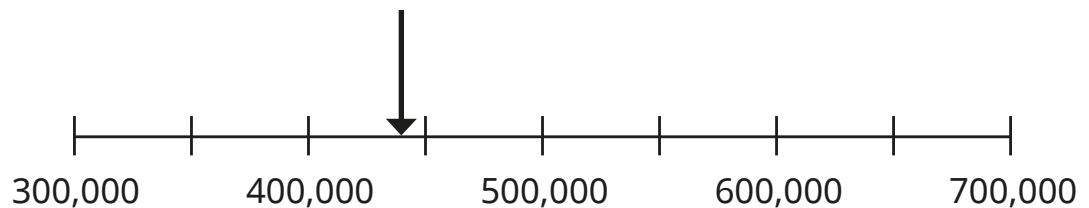**6** Complete the sentence in two **different** ways.

3,862 = 3,000 + ⬚ + 50 + ⬚

3,862 = 3,000 + ⬚ + 50 + ⬚

7 Here is a number line.

300,000   400,000   500,000   600,000   700,000

Estimate the number shown by the arrow.

⬚

Draw an arrow to show the approximate position of 505,000 on the number line.

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8 Complete the sentences.

350 is 40 more than [ ]

[ ] is 40 more than 1,387

9 Complete the table by rounding the numbers to the **nearest 1,000**

Number	Rounded to the nearest 1,000
148,200	
14,820	
1,482	

10 Fill in the missing number.

$$2\frac{\boxed{}}{7} = \frac{17}{7}$$

11 88,134 people live in Halifax.

97,541 people live in Lincoln.

How many more people live in Lincoln than in Halifax?

Show your method

12 Write the numbers in the correct place in the table.

8   3   10

	Factor of 40	Prime
Multiple of 4		
Not a multiple of 4		

Explain why no numbers can be written in the shaded box.

13 Circle the greater fraction.

$$\frac{2}{5} \qquad \frac{7}{12}$$

Explain how you know.
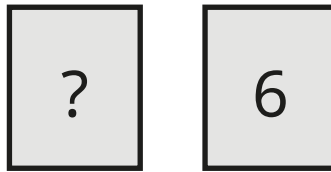
14 Complete the sequence.

	493,000	483,000	473,000	

15 Alex makes a fraction using two number cards.

| ? | 6 |

Alex says,

"My fraction is equivalent to two-thirds.

One of the number cards is 6"

What could Alex's fraction be?

Give both possible answers.

$$\frac{\boxed{}}{\boxed{}} \quad \text{or} \quad \frac{\boxed{}}{\boxed{}}$$

2 marks

16 Ron chooses a square number.

He rounds it to the nearest hundred.

His answer is 100

Write all the possible square numbers Ron could have chosen.

_____

17 Rosie and Sam pick berries.

Rosie picks $3\frac{2}{5}$ kg of berries.

Sam picks $1\frac{7}{10}$ kg of berries.

How many kilograms of berries do they pick altogether?

Show your method

18 In total there are 5,642 people at a theme park.

There are 1,200 more children than adults at the theme park.

How many adults are at the theme park?

Show your method

2 marks

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