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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White Rose Maths

Instructions

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

Questions and answers

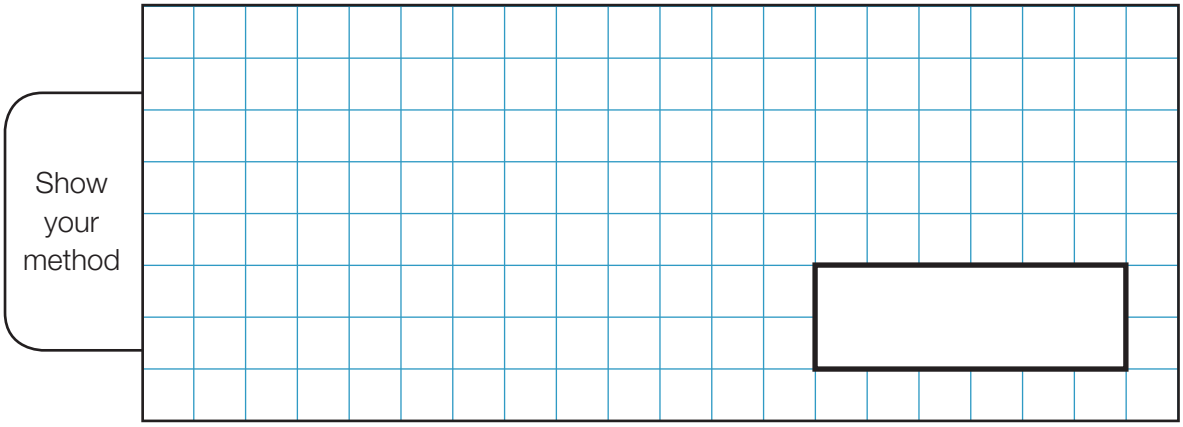
You have **35 minutes** to complete this test.

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**.

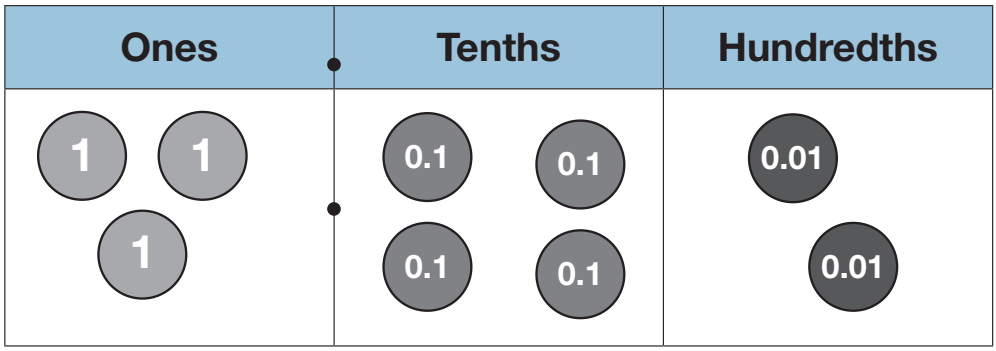
You can come back to it later, if you have time.

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.

1 Sam uses counters to represent a number.



What is Sam's number?

1 mark

Sam adds 2 tenths to his number.

What is Sam's new number?

1 mark

2 Two teams take part in a competition.

Team A has 352 points.

Team B has 78 fewer points than Team A.

How many points do Team B have?

Show your method

points

1 mark

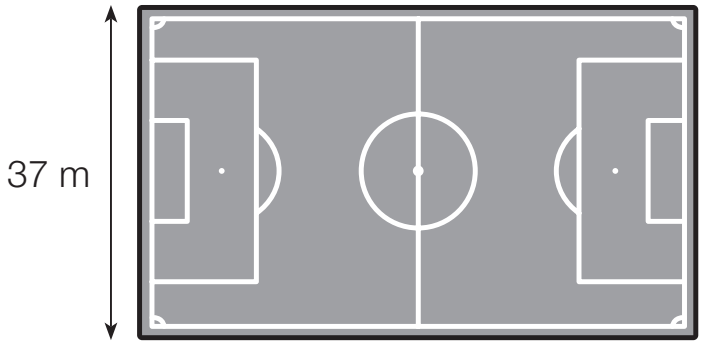
3 Raj completes this calculation.

$$\begin{array}{r} 28 \\ \times \quad 3 \\ \hline 64 \\ \hline 2 \end{array}$$

Explain Raj's mistake.

1 mark

4 The length of the football pitch is double the width.



What is the length of the football pitch?

m

1 mark

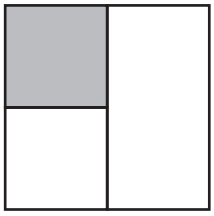
Calculate the perimeter of the football pitch.

m

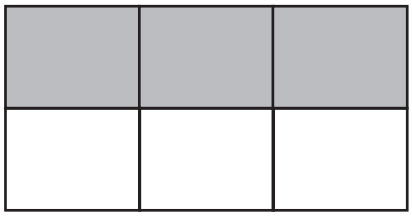
1 mark

5 Match each fraction to the correct diagram.

$\frac{1}{3}$



$\frac{1}{4}$

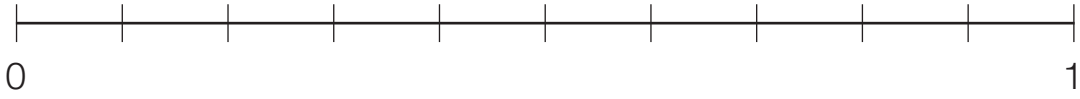


$\frac{1}{2}$

1 mark

6 Write these numbers in the correct position on the number line.

$\frac{1}{2}$ $\frac{3}{10}$



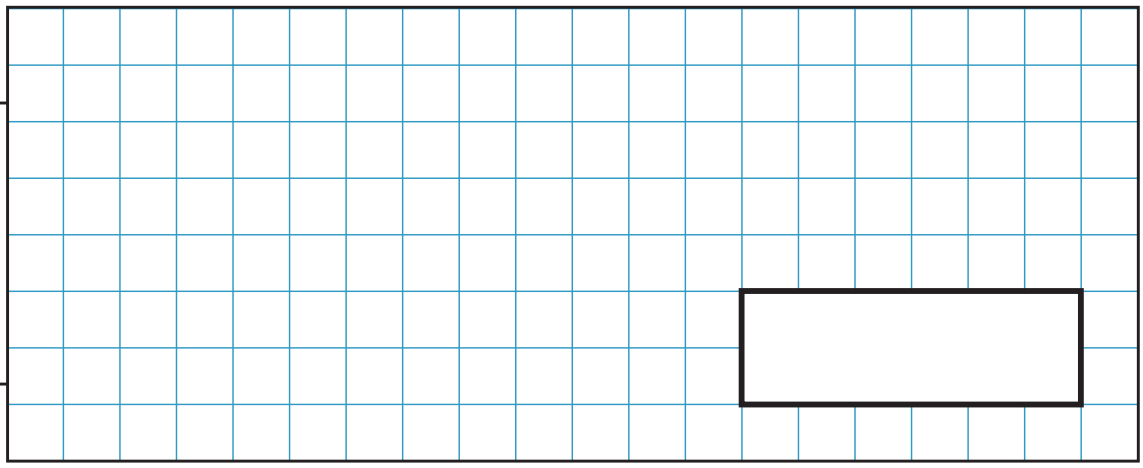
2 marks

7 Mr Cook buys 72 drinking straws.

$\frac{3}{8}$ of the straws are blue and the rest are red.

How many of the straws are **red**?

Show your method



2 marks

8 Circle the fraction that is **not** equivalent to $\frac{3}{4}$

$\frac{15}{20}$ $\frac{7}{8}$ $\frac{9}{12}$ $\frac{12}{16}$

1 mark

9 Board games cost £7.00

Books cost £1.50

Four children share the cost of a board game and 2 books.

How much does each child pay?

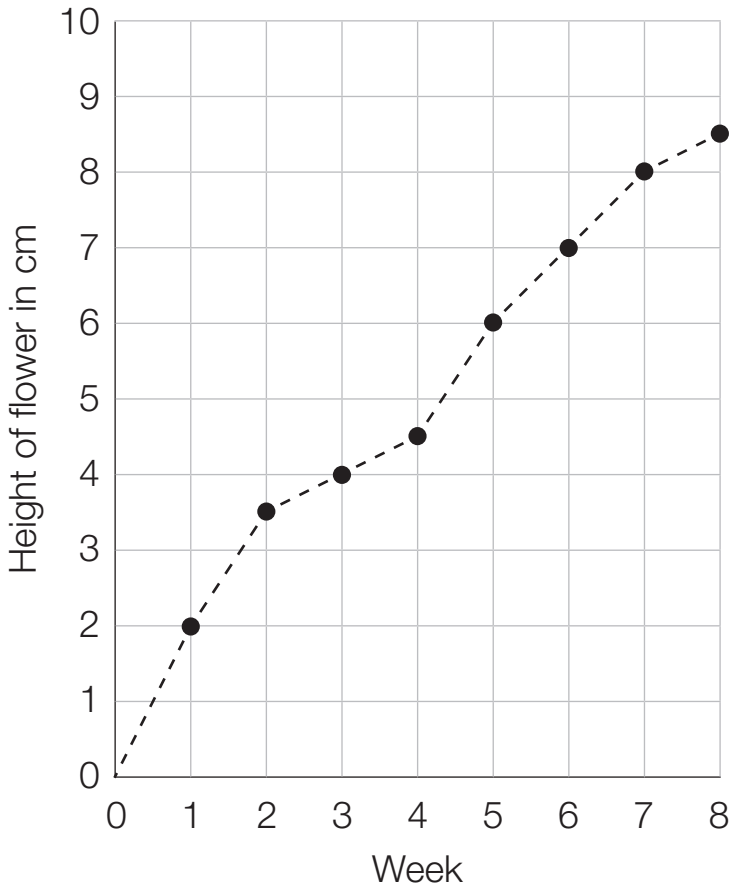
Show your method

£

2 marks

10 The height of a flower is measured every week for 8 weeks.

The graph shows the height at the end of each week.



What is the height of the flower at the end of week 7?

cm

1 mark

How much does the height of the flower increase between the end of week 2 and the end of week 8?

cm

1 mark

11 Complete the table.

Fraction	Decimal	Percentage
$\frac{4}{10}$	0.4	%
	0.51	51%
$\frac{3}{100}$		%

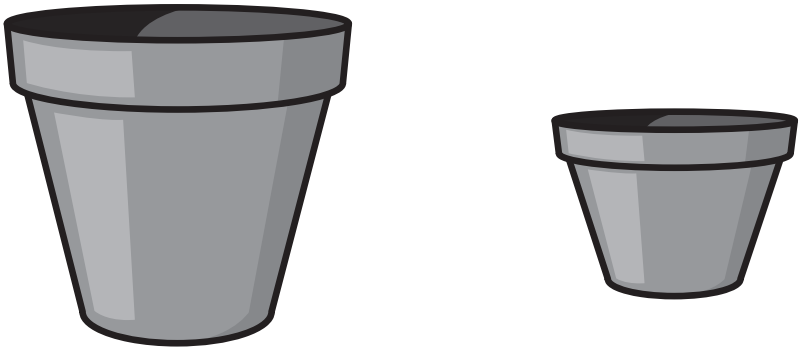
2 marks

12 Put the numbers in ascending order.

6.002 6.2 6.22 6.02

1 mark

13 3 small plant pots cost £6



2 large plant pots **and** 6 small plant pots cost £21

What is the cost of 1 large plant pot?

Show your method

£

2 marks

14 The sum of a prime number and a square number is 21

Complete the calculation.

Prime Number		Square Number		
☐	+	☐	=	21

1 mark

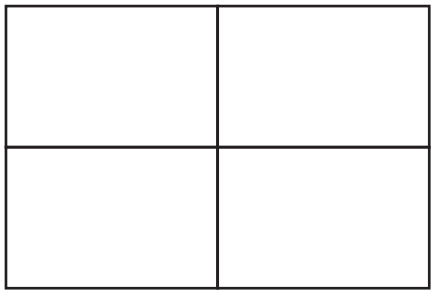
15 Complete the statement.

$$6\frac{2}{5} = \frac{\square}{5}$$

1 mark

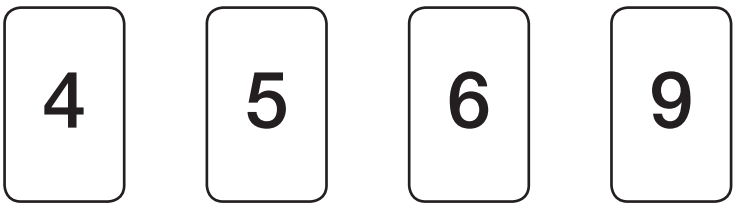
16 This shape is divided into quarters.

Shade in one eighth of the shape.



1 mark

17 Here are some digit cards.



Use the cards to make a number that rounds to **6,000** to the nearest thousand.

You may only use each card once.

1 mark

Now use the cards to make a number that rounds to **7,000** to the nearest hundred.

You may only use each card once.

1 mark

18 The children in Class 5 vote for their end of term trip.

A quarter of the children vote to go to the cinema.

$\frac{2}{5}$ of the children vote to go bowling.

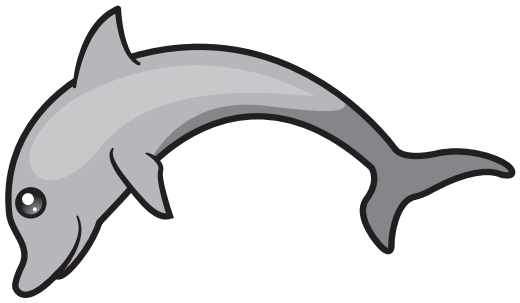
The rest of the children vote to go swimming.

What **percentage** of the children vote to go swimming?

%

2 marks

19 The mass of a dolphin is a quarter of the mass of a seal.



The seal is 126 kg heavier than the dolphin.

What is the total mass of the dolphin and the seal?

kg

2 marks

END OF TEST

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