

Mark scheme for Set A: Paper 2 (Non-calculator)

Q	Mark	Answers	Further information and tips
1	1 1	26 874.1 1.37185 Do not allow any marks for more than one decimal point within a number.	<p>Number, place value, approximation and estimation</p> <p>Tip: The decimal point is the most important part of a decimal number. It is exactly to the right of the units position.</p> <p>Write place value headings above each number using the value of 7 as your starting point.</p>
2	1	44 l cm ³	<p>Measures</p> <p>Tip: To find the volume of a cuboid, you multiply the length, height and width together. In this question we know all the measurements.</p> <p>So $7 \times 7 = 49$ then $49 \times 9 = 441 \text{ cm}^3$</p>
3	1	$38 + 39 + 40 + 41 + 42 = 200$	<p>Multiplication and division</p> <p>Tip: First divide 200 by 5 to give 40. This is the middle number of the five numbered tickets. Work forwards and backwards from 40. This then makes five consecutive numbers.</p>
4	2	<p>False</p> <p>One fifth is not <i>exactly</i> half way between one quarter and one sixth.</p> <p>For 2 marks an explanation must be given which can demonstrate a worked example showing that $\frac{1}{5}$ is not half way between $\frac{1}{4}$ and $\frac{1}{6}$ such as the following:</p> <p>$\frac{1}{4}$ of 60 = 15</p> <p>$\frac{1}{6}$ of 60 = 10</p> <p>$\frac{1}{5}$ of 60 = 12</p> <p>12 is not halfway between 15 and 10 but $12 \frac{1}{2}$ is.</p> <p>Award 1 mark for answers saying that $\frac{1}{5}$ is <i>approximately</i> half way if this is demonstrated with an explanation or diagram.</p> <p>Do not award any marks for showing the decimal equivalents without any explanation, such as:</p> <p>$\frac{1}{4} = 0.25$</p> <p>$\frac{1}{5} = 0.2$</p> <p>$\frac{1}{6} = 0.16667$</p>	<p>Fractions</p> <p>Tip: Merely stating true or false is not enough to get 1 mark as you are being asked to evidence your thinking and show your understanding.</p> <p>For example, to be awarded 2 marks you may show evidence of your understanding of equivalent fractions:</p> <p>$\frac{1}{6}$ is equivalent to $\frac{2}{12}$ or $\frac{4}{24}$</p> <p>$\frac{1}{4}$ is equivalent to $\frac{3}{12}$ or $\frac{6}{24}$</p> <p>$\frac{5}{24}$ is exactly halfway between $\frac{1}{4}$ and $\frac{1}{6}$</p> <p>$\frac{5}{24}$ is not equivalent to $\frac{1}{5}$ because $\frac{5}{25}$ is the same as $\frac{1}{5}$</p> <p>Therefore $\frac{1}{5}$ is not exactly halfway between $\frac{1}{4}$ and $\frac{1}{6}$.</p>