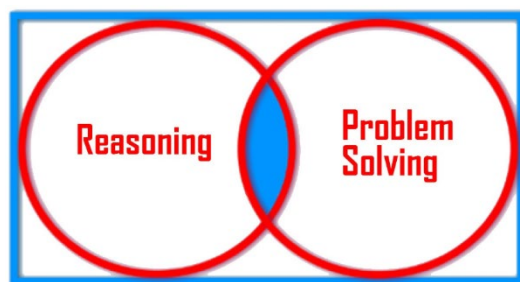


GCSE Foundation (5 – 1)



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Mathematical Reasoning Questions

(Ratio) – Set 1

**The marks shown are for guidance purposes only
[Total marks: 12 Marks]**

1	<p>Shannon say's, 'If £120 is shared in the ratio 5:7 it will be the same as £70:£50' Comment on the accuracy of Shannon's statement</p> <p style="text-align: right;">[1mark]</p>
2	<p>Simplify the ratio 1hour 15minutes : 35minute Make your choice</p> <p>a) 2: 1 b) 7: 15 c) 15: 7 d) 1: 2</p> <p style="text-align: right;">[1mark]</p>
3	<p>Choose all the ratios which are equivalent to 20: 35</p> <p>a) 175: 100 b) 40: 70 c) 100: 175 d) 70: 40</p> <p style="text-align: right;">[1mark]</p>
4	<p>If $6: 11 = n: 1$ then n must be equal to</p> <p>a) $\frac{11}{6}$ b) $\frac{6}{17}$ c) $\frac{6}{11}$ d) $\frac{17}{6}$</p> <p style="text-align: right;">[1mark]</p>

5	<p>The ratio of Boys to Girls in a class is 7:5. What fraction of the class are girls?</p> <p>a) $\frac{5}{7}$ b) $\frac{7}{5}$ c) $\frac{5}{12}$ d) $\frac{7}{12}$</p> <p style="text-align: right;">[1mark]</p>
6	<p>The ratio of A to B is 3: 0.8 what fraction of A is B Choose one answer</p> <p>a) $\frac{3}{8}$ b) $\frac{4}{15}$ c) $\frac{8}{3}$ d) $\frac{15}{4}$</p> <p style="text-align: right;">[1mark]</p>
7	<p>Divide £630 into the ratio 7:3 <u>Lilly's Answer</u> $\frac{3}{7} \times 630 = 210$ $630 - 210 = 420$ Check: $420 + 210 = \text{£}630$ Lilly is wrong. Without using a different method, modify Lilly's method to find the right answer.</p> <p style="text-align: right;">[1mark]</p>

<p>8</p>	<p>Given that $5n:8 = 3:1$ Find the value of n</p> <p>a) $\frac{5}{8}$ b) $\frac{1}{3}$ c) $4\frac{4}{5}$ d) $1\frac{3}{5}$</p> <p style="text-align: right;">[1mark]</p>
<p>9</p>	<p>Joanna, Laila and Lacey have £84 to share. The ratio of Joanna's share to the combined share between Laila and Lacey is 1:5. Laila received £10 more than Lacey. How much did Lacey get? Choose one answer</p> <p>a) £30 b) £40 c) £16 d) £14</p> <p style="text-align: right;">[2marks]</p>
<p>10</p>	<p>Given that $a:b = 1:7$ Choose the equation(s) which connects a and b</p> <p>a) $a = \frac{7}{b}$ b) $b = 7a$ c) $a = \frac{1}{7}b$ d) $b = \frac{1}{7}a$</p> <p style="text-align: right;">[2marks]</p>