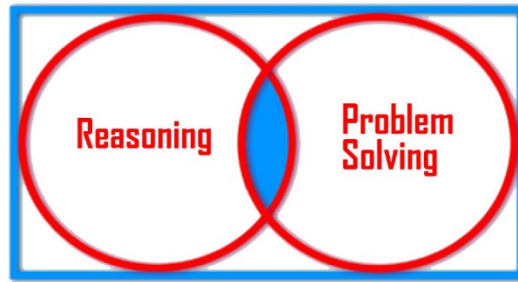


GCSE Foundation (5 – 1)



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Mathematical Reasoning Questions

(Order of Operation) – Set 1

**The marks shown are for guidance purposes only
[Total marks: 22 Marks]**

1	<p>Complete the calculation below by filling in the missing numbers</p> $8 + (5 \times 3) - 7 = 4 + (\square \times \square) - 5$ <p style="text-align: right;">[2Marks]</p>
2	<p>Choose the correct answer for the calculation below</p> $5 + 3 \times 4^2 - 2 \times 2 - 3$ <p>a) 249 b) 46 c) 99 d) 10</p> <p style="text-align: right;">[1Mark]</p>
3	<p>Insert brackets to make the following calculations correct</p> <p>a) $81 \div 9 \times 12 - 4 = 104$ [1Mark]</p> <p>b) $81 \div 9 \times 12 - 4 = 72$ [1Mark]</p>
4	<p>Here is an incomplete calculation: $5 + 4 \times \square$ Write a number in the empty box so that, the calculation will give an answer which is a perfect square</p> <p style="text-align: right;">[1Mark]</p>
5	<p>Choose the correct answer for the calculation below</p> $7 + (5 - (5 - 9)^2)$ <p>a) 8 b) -4 c) -1 d) 4</p> <p style="text-align: right;">[1Mark]</p>

6	<p>Write down the greatest value of x for which the calculation $(x - 3) - (-5 \times 2)$ is less than zero.</p> <p style="text-align: right;">[3Marks]</p>
7	<p>Which of the following calculations will give the largest answer? Show how you decide.</p> <p>a) $\frac{1}{2} + \frac{1}{3} \times \frac{1}{4}$</p> <p>b) $\frac{1}{2} \times \frac{1}{3} + \frac{1}{4}$</p> <p style="text-align: right;">[5Marks]</p>
8	<p>Answer True or False to the following calculations</p> <p>a) $3 + 5 \times -4 = -17$</p> <p>b) $(6 + 3)(5 - 7) < 0$</p> <p>c) $(7 - 12)^2 + 3 = -28$</p> <p style="text-align: right;">[3Marks]</p>

9 John wants to solve the calculation below
$$5[6 + (3 \times -5) + 2]$$

Write a set of instructions for John to use

[2Marks]

10 Write a number in the empty box so that

$$\frac{16 + (8 - \square)}{3} = 5\frac{1}{7} + 1\frac{6}{7}$$

[2Marks]