

# ANSWERS



Maths Focus: Mental and written calculation, using the inverse operation, fractions and percentages

Helpful Hints: start at the end number and work back up the steps doing the inverse operation each time

Level 1	Level 2	Level 3																							
<p>Alfie starts with a number and then carries out a series of calculations.</p> <table border="1"><tr><td><b>He starts on 8</b></td></tr><tr><td>He adds 4 = 12</td></tr><tr><td>He halves the number = 6</td></tr><tr><td>He takes away 1 = 5</td></tr><tr><td>He multiplies it by 2 = 10</td></tr><tr><td><b>He ends on 10</b></td></tr></table> <ol style="list-style-type: none"><li>1. What number does Alfie start on?</li><li>2. What is each answer in the sequence?</li></ol>	<b>He starts on 8</b>	He adds 4 = 12	He halves the number = 6	He takes away 1 = 5	He multiplies it by 2 = 10	<b>He ends on 10</b>	<p>Alfie starts with a number and then carries out a series of calculations. mystery</p> <table border="1"><tr><td><b>He starts on 12</b></td></tr><tr><td>He increases it by 8 = 20</td></tr><tr><td>He quarters the number = 5</td></tr><tr><td>He multiplies it by 6 = 30</td></tr><tr><td>He finds <math>\frac{1}{3}</math> = 10</td></tr><tr><td>He decreases the number by 7.5 = 2.5</td></tr><tr><td><b>He ends on 2.5</b></td></tr></table> <ol style="list-style-type: none"><li>1. What number does Alfie start on?</li><li>2. What is each answer in the sequence?</li></ol>	<b>He starts on 12</b>	He increases it by 8 = 20	He quarters the number = 5	He multiplies it by 6 = 30	He finds $\frac{1}{3}$ = 10	He decreases the number by 7.5 = 2.5	<b>He ends on 2.5</b>	<p>Alfie starts with a number and then carries out a series of calculations.</p> <table border="1"><tr><td><b>He starts on 35</b></td></tr><tr><td>He finds <math>\frac{3}{7}</math> of the number = 15</td></tr><tr><td>He increases the number by 25 = 40</td></tr><tr><td>He takes 75% of the number = 30</td></tr><tr><td>He multiplies this by 7 = 210</td></tr><tr><td>He divides this by 10 = 21</td></tr><tr><td>He takes <math>\frac{1}{3}</math> of this number = 7</td></tr><tr><td>He multiplies this by <math>1\frac{1}{2}</math> = 10.5</td></tr><tr><td>He subtracts 20 = 9.5</td></tr><tr><td><b>He ends on - 9.5</b></td></tr></table> <ol style="list-style-type: none"><li>1. What number does Alfie start on?</li><li>2. What is each answer in the sequence?</li></ol>	<b>He starts on 35</b>	He finds $\frac{3}{7}$ of the number = 15	He increases the number by 25 = 40	He takes 75% of the number = 30	He multiplies this by 7 = 210	He divides this by 10 = 21	He takes $\frac{1}{3}$ of this number = 7	He multiplies this by $1\frac{1}{2}$ = 10.5	He subtracts 20 = 9.5	<b>He ends on - 9.5</b>
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