

Core Knowledge

Topic/Skill	Definition/Tips	Example
1. Solve	<p>To find the answer/value of something</p> <p>Use inverse operations on both sides of the equation (balancing method) until you find the value for the letter.</p>	<p>Solve $2x - 3 = 7$</p> <p>Add 3 on both sides</p> $2x = 10$ <p>Divide by 2 on both sides</p> $x = 5$
2. Inverse	<p>Opposite</p>	<p>The inverse of addition is subtraction. The inverse of multiplication is division.</p>
3. Rearranging Formulae	<p>Use inverse operations on both sides of the formula (balancing method) until you find the expression for the letter.</p> <p>Note the subject appears twice</p>	<p>Make x the subject of $y = \frac{2x-1}{z}$</p> <p>Multiply both sides by z</p> $yz = 2x - 1$ <p>Add 1 to both sides</p> $yz + 1 = 2x$ <p>Divide by 2 on both sides</p> $\frac{yz + 1}{2} = x$ <p>We now have x as the subject.</p> <p>Make x the subject of $x = 2xy - 1$</p> $x - 2xy = -1$ $x(1-2y) = -1$ $x = \frac{-1}{(1-2y)}$

Links to expanding or multiplying out brackets, proportional thinking – how do you make a whole one if you have one-third, how do you make a whole one if you have two thirds