

• **EXAMPLES:**

$6x = 18$ $\frac{6x}{6} = \frac{18}{6}$ $x = 3$	<ul style="list-style-type: none"> • Divide both sides of the equation by 6 to leave just "x" on the left hand-side.
$3x - 5 = 19$ $3x - 5 + 5 = 19 + 5$ $\frac{3x}{3} = \frac{24}{3}$ $x = 8$	<ul style="list-style-type: none"> • Add 5 to both sides of the equation to remove the -5 from the left hand-side. • Divide both sides by 3 to leave just "x" on the left hand-side.
$18 = 4(x + 3)$ $18 = 4x + 12$ $18 - 12 = 4x + 12 - 12$ $\frac{6}{4} = \frac{4x}{4}$ $1.5 = x$	<ul style="list-style-type: none"> • Multiply out the bracket. • Subtract 12 from the both sides of the equation to remove the +12 on the right hand-side. • Divide both sides by 4 to leave just "x" on the right hand-side.
$18 = 4(x + 9)$ $18 = 4x + 36$ $18 - 36 = 4x + 36 - 36$ $\frac{-18}{4} = \frac{4x}{4}$ $-4.5 = x$	<ul style="list-style-type: none"> • Multiply out the bracket. • Subtract 36 from both sides of the equation. • Divide both sides by 4 to leave just the "x" on the right-hand side.
$5(x + 6) = 20$ $5x + 30 = 20$ $5x + 30 - 30 = 20 - 30$ $\frac{5x}{5} = \frac{-10}{5}$ $x = -2$	<ul style="list-style-type: none"> • Multiply out the bracket. • Subtract 30 from both sides of the equation. • Divide both sides of the equation by 5.
$8x - 7 = 5x + 2$ $8x - 5x - 7 = 5x - 5x + 2$ $3x - 7 + 7 = 2 + 7$ $\frac{3x}{3} = \frac{9}{3}$ $x = 3$	<ul style="list-style-type: none"> • Rearrange all the x's on the right and the constant terms on the left. • Collect all like terms. • Divide both sides of the equation by 3.