

**YEAR 8**

Solving Linear Equations

Work through the sections in order, as each builds on the last. Always show the operation you apply to both sides.

Section A · One-step equations

1 $x + 7 = 19$ $x = 12$

2 $x - 5 = 12$ $x = 17$

3 $4x = 36$ $x = 9$

4 $x \div 3 = 7$ $x = 21$

5 $x + 13 = 8$ $x = -5$

6 $9x = -45$ $x = -5$

Section B · Two-step equations

1 $2x + 5 = 17$ $x = 6$

2 $3x - 4 = 20$ $x = 8$

3 $5x + 8 = 43$ $x = 7$

4 $4x - 9 = 15$ $x = 6$

5 $2x + 11 = 3$ $x = -4$

6 $7x - 2 = -30$ $x = -4$

Section C · Brackets and unknowns on both sides

1 $3(x + 2) = 21$ $x = 5$

2 $2(x - 4) = 10$ $x = 9$

3 $5x + 3 = 2x + 18$ $x = 5$

4 $6x - 5 = 2x + 19$ $x = 6$

5 $4(x + 1) = 2(x + 9)$ **$x = 7$**

6 $3(2x - 1) = 4x + 9$ **$x = 6$**
