

**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.

Name: _____

Date: _____

Score: _____

Section A · One-step equations

Undo the single operation applied to x .

1 $x + 7 = 19$

2 $x - 5 = 12$

3 $4x = 36$

4 $x \div 3 = 7$

5 $x + 13 = 8$

6 $9x = -45$

Section B · Two-step equations

Undo addition or subtraction first, then multiplication or division.

1 $2x + 5 = 17$

2 $3x - 4 = 20$

3 $5x + 8 = 43$

4 $4x - 9 = 15$

5 $2x + 11 = 3$

6 $7x - 2 = -30$

Section C • Brackets and unknowns on both sides

Expand brackets first, then collect the x terms.

1 $3(x + 2) = 21$

2 $2(x - 4) = 10$

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

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

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

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