YEAR 8 • ALGEBRA

Solving Linear Equations with One Variable

Name _____ **Date** _____

Solve each equation. Show your inverse operations in the working space and write your solution. Undo the addition or subtraction first, then divide both sides by the coefficient of x. Keep both sides balanced.

Practise

1 $2x + 5 = 17$

WORKING

x = _____

2 $3x + 4 = 25$

WORKING

x = _____

3 $4x + 7 = 35$

WORKING

x = _____

4 $5x + 6 = 41$

WORKING

x = _____

5 $6x - 3 = 33$

WORKING

x = _____

6 $7x - 8 = 41$

WORKING

x = _____

7 $8x + 9 = 73$

WORKING

x = _____

8 $9x - 5 = 67$

WORKING

x = _____

Challenge

Show each step.

9 $12x + 11 = 95$

WORKING

x = _____

10 $15x - 7 = 113$

WORKING

x = _____

Check your solutions: substitute each value of x into the original equation.