

EQUATIONS

Level 1

4 steps to solving simple equations.

INVERSE i.e. do the OPPOSITE to UNDO.

$$x + 2 = 3 \quad (\text{take 2 from both sides}) \quad \text{then } x = 1$$

$$x - 2 = 3 \quad (\text{add 2 to both sides}) \quad \text{then } x = 5$$

$$y \times 2 = 12 \quad (\text{divide both sides by 2}) \quad \text{then } y = 6$$

$$\frac{y}{2} = 12 \quad (\text{multiply both sides by 2}) \quad \text{then } y = 24$$

Examples

$$x + 5 = 8 \quad x + 5 - 5 = 8 - 5 \quad \text{then } x = 3$$

$$x - 5 = 8 \quad x - 5 + 5 = 8 + 5 \quad \text{then } x = 13$$

$$4y = 24 \quad 4y/4 = 24/4 \quad \text{then } y = 6$$

$$y/3 = 10 \quad y/3 \times 3 = 10 \times 3 \quad \text{then } y = 30$$

Practise

a) $a + 3 = 8$

b) $b - 7 = 3$

c) $9c = 27$

d) $\frac{d}{5} = 6$

e) $3e = -6$

f) $\frac{f}{7} = -2$

g) $g - 11 = 3$

h) $h + 15 = 10$

j) $3j = -30$

NOW LET'S TRY putting two together. SOLVING TWO-STEP EQUATIONS.

k) $2k - 4 = 6$

m) $3k + 6 = 15$

n) $5n - 11 = -1$

p) $\frac{p}{4} - 3 = 2$

q) $\frac{q}{6} + 4 = 6$

r) $\frac{r}{7} + 5 = 4$

s) $5s + 12 = -3$

t) $4t - 4 = -2$

u) $\frac{3u}{5} = 6$

v) $\frac{3v}{2} = 12$

w) $6 - w = 4$

x) $15 - 2w = 9$

