

Solving Equations

How to ... remember to multiply both terms by 3 when expanding the bracket.

(a) Solve

$$3(x - 2) = x + 7$$

$$\begin{aligned} 3x - 6 &= x + 7 \\ 2x - 6 &= 7 \\ 2x &= 13 \\ x &= 6.5 \end{aligned}$$

(3)

(b) Solve $\frac{2-y}{5} = 1$

$$\begin{aligned} 5 \times \frac{2-y}{5} &= 1 \times 5 \\ 2-y &= 5 \\ -y &= 3 \\ \text{so } y &= -3 \end{aligned}$$

(2)

Now have a go yourself ...

MUST

- a) $5x + 4y + 6x + 7y$ b) $7x + 2y - 5x - 7y$
c) $7x - 7y + 11x - 4y$ d) $2x - 7y + 11x - 4y$
e) $-2x + 3y - 3x$ f) $5x^2 + 3x - 2x^2 + 2$

SHOULD

- a) $2(2x + 5)$ b) $3(2x + 4)$ c) $6(4x + 7)$
d) $x(2x - 3)$ e) $2x(2x - 3)$ f) $3x(x - 1)$
g) $3x + 1 = 7$ h) $2x + 1 = 11$ i) $3x + 6 = 30$

COULD

- a) $6x - 1 = 5$ b) $3x - 2 = 16$ c) $2x - 7 = 7$
d) $15 = 6 - 12x$ e) $3x + 8 = 2$ f) $15 + 3x = 3$
g) $-5 = 4 + 3x$ h) $10x + 5 = 5$ i) $3x + 5 = 2$
j) $6 = 3 - 10x$ k) $12 - 2x = 11$ l) $8x + 6 = 12$

0.5	-3	4x+10	1	18x-11y	-0.75	8
$3x^2+3x+2$	-2	13x-11y	-1	$3x^2-3x$	$11x+11y$	
7	2x-5y	24x+42	0.75	0	6x+12	
$4x^2-6x$	5	-0.3	2x^2-3x	6	-5x+3y	-4 2

Exam Questions

Simplify the following:

a) $4(3x+5)$

b) $5(x - 2)$

c) $2(x - 4) + 3(x + 5)$

d) $4(2m - 3m)$

e) $13x - 24y + 17x + 14y$

f) $2a + 3b - a - b$

g) $4m(2m - 1)$

h) $6(1 - 2x) - 3(x + 1) = 0$

i) $5x - 16 = 4$

j) $3(x + 2) = 4$

k) $2q - 4 = 5q + 5$

l) $2x + 4 = 6(x - 1)$

Ready to be marked ?

Checklist

☐

Answer checked

☐

Working out shown



Keywords



Things to remember ...



What went well ...

Teacher comment ..