

## How to ...

(a) Simplify  $5x + 4y + x - 7y$

*split the expression after every term.*

$$\begin{array}{r} 5x + x + 4y - 7y \\ \hline 6x - 3y \end{array} \quad (2)$$

sometimes you will have to expand brackets before collecting 'like' terms

(b) Solve  $7(x + 2) = 7$  ... *lets expand the bracket first*

$$\begin{array}{l} (-14) \quad 7x + 14 = 7 \\ (\div 7) \quad \frac{7x}{7} = \frac{-7}{7} \\ \quad \quad \quad x = -1 \end{array}$$

Remember you can have negative values... (2)  
you can also have decimals and fractions 😊

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	$2x - 5y$	<b><math>24x + 42</math></b>	0.75	0	$6x + 12$	
$4x^2 - 6x$	5	-0.3	<b><math>2x^2 - 3x</math></b>	6	<b><math>-5x + 3y</math></b>	-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

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### Things to remember ...

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### What went well ...

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### Teacher comment ..