Expand and Simplify Single Brackets

Literacy The keyboard had sticking keys and missed out all the vowels. Discover the words and write one sentence including as many of the words as you can. Which word totals 15?

xpnd   mltply   smplfy   vrbl   xprssn

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
1 3 3 2 1 4 2 4 1 8 5 1 3 1 1 3 10 1 1 1 4 4 8 4 10

Skill 1   **Expand**

1) $3(x + 4) =$
2) $2(x + 4) =$
3) $3(x - 4) =$
4) $3(x - 7) =$
5) $-5(x + 8) =$
6) $2(3x + 4) =$
7) $2(3x - 4) =$
8) $-4(5x + 3) =$
9) $6(2x + y) =$
10) $5(3x + 3y) =$
11) $7(2x - 7y) =$
12) $x(2x + 4) =$
13) $2x(3x + 5) =$
14) $3x(5x - 6) =$
15) $4y(2x - 3y) =$

Skill 2   **Expand and Simplify**

1) $3x + 2(x + 5) =$
2) $6 + 4(x + 3) =$
3) $4x + 2(x - 5) =$
4) $5x - 2(x + 8) =$
5) $5x - 2(x - 8) =$
6) $3(x + 7) + 6(3x + 4) =$
7) $4(2x + 5) + 3(3x - 4) =$
8) $4(3x + 2) + 6(4x + 3) =$
9) $6(x + 7) - 3(x + 4) =$
10) $3(8x - 4) + 4(2x + 5) =$
11) $6(5x + 7) - 2(x - 4) =$
12) $5(x + 7) - 2(x - 9) =$
13) $6(y - 8) - 3(x + 5) =$
14) $8(3x + 7) - 3(2x + 8) =$
15) $9(8x - 5) - 7(8x - 9) =$

www.missbsresources.com

Memory

Use either the claw or the box method to expand expressions. Remember to multiply both terms by the co-efficient.

Expand $3(x + 5)$

Claw $3(x + 5) = \underline{3x + 15}$

Box

	x	$+5$
3	$3x$	$+15$

$\underline{3x + 15}$

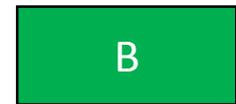## Stretch 1

Write an expression for the area of these shapes.

A   3 cm   B   8 cm

$2x + 9$ $3x + \frac{1}{2}$

C $12x$ $7x$

D

$0.25x + 1.5$ $4x + 3$

Stretch 2   **Expand and Simplify**

1) $(x + 3)(x + 5) =$
2) $(x + 3)(x - 5) =$
3) $(x - 3)(x - 5) =$
4) $(2x + 4)(x - 7) =$