

Expanding Brackets

Expanding / multiplying out brackets is a key algebra skill !

You need to multiply the expression outside of the bracket by everything that is inside of the bracket.

So for example;

$$4n(n + 2) = 4n^2 + 8n$$

The term 'Expand and simplify' basically means to 'multiply out then collect the terms'

Golden Rule

When you expand you need to be careful with negative signs in front of the bracket, they belong to the term to their right.

$$\begin{aligned}x - 2(x - y) &= x - 2x + 2y \\ &= -x + 2y\end{aligned}$$

Multiply out the bracket first then collect the terms if possible.

You can use the **grid method** to expand two brackets !

$$(x + 7)(x - 5)$$

	x	-5
x	x^2	$-5x$
7	$7x$	-35

Remember, the negative belongs to the 5 ! You need to write it in your grid.