

The Grid Method of Multiplication

1. Set up the grid as shown. Often, it will only be a two by two grid.

$$(3x + 7)(4x^3 - 3x^2 + 5x + 8)$$

$$4x^3 - 3x^2 + 5x + 8$$

\times	$4x^3$	$-3x^2$	$+5x$	$+8$
$3x$				
$+7$				

2. Find the product of each term in the row at the top and each term in the column on the side.

For instance, in the grid above, you would need to do the following calculations.

$$4x^3 \times 3x = 12x^4$$

$$-3x^2 \times 3x = 9x^3$$

$$5x \times 3x = 15x^2$$

$$8 \times 3x = 24x$$

$$4x^3 \times 7 = 28x^3$$

$$-3x^2 \times 7 = 21x^2$$

$$5x \times 7 = 35x$$

$$8 \times 7 = 56$$

3. Put each answer in the box where the two factors meet (in the same way as when you are playing battleships).
4. Finally, add the eight terms that you have put in the boxes together.