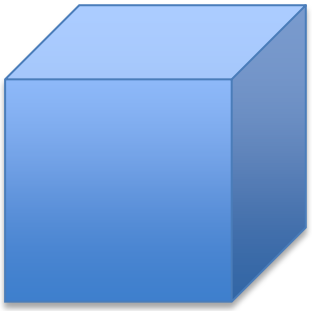
Distributive Law – Part 2 | MFM1P

Today we will be "re-looking" at the distributive law. Last week, we used the distributive law with only numbers. Let's practice a few to remember…

a) $4(x + 4) =$ _____ b) $-2(x^2 + 5x - 3) =$ _____

Before we move on to the new type of distributive law question, let's look at something you know that will help you…



Key Idea:

Next we are going to look at what happens when you multiply a "monomial" (a term) with another monomial. We will then extend our understanding of the distributive law.

Multiply.

a) $4(5\mathbf{d})$ b) $(-3\mathbf{b})(-5\mathbf{b})$ c) $(-2\mathbf{f})(4\mathbf{f}^2)$ d) $\mathbf{x}^2\,(9\mathbf{x})$

When multiplying two monomials, multiply the _____ first and the _____ second.

Let's try a few more…

a) $-2(3b^2)$ b) $(3a)(4a)$ c) $(4b)(-5b^2)$

d) $-3x^2(2x)$ e) $(3a)^2$ f) $(4b)^3$

The Distributive Law (Rainbowing) with Variables

*If you multiply a **monomial** by a bracket, then multiply each term in the bracket by that **monomial**.*

2x (x + 3) =

Let's do some together, expand the following using the distributive law:

a) $-3x (5x - 7)$

= _____

b) $2x (2x^2 + 1)$

= _____

c) $-3y^2 (2y - 1)$

= _____

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

= _____

e) $-2b (- b^2 + 4b - 1)$

= _____

f) $5a^2 (-5a + 6)$

= _____

Higher level expressions require us to use the distributive law, multiply monomials, as well as collecting like terms! Let's try a couple.

g) $2x (2x^2 + 4x - 3) + 5x - 2$

= _____

= _____

h) $2x(3x - 5) - 3x (x - 3)$

= _____

= _____