


The Distributive Property


When we multiply m by $(x+y)$, we need to _____ the multiplication of the m to the ___ and the ____.
 This is called the _____. (Some call it Ross Arrows or the Rainbow.)
 We need the Distributive Property when there are variables in the expression which will not allow us to simplify following BEDMAS.

Example 1: Expand. (i.e., Multiply it out.)

a)  $3(x + 2)$

b)  $-5(n - 5)$


c)  $(-r + 2)(-5)$

d)  $3(x^2 + 4x + 2)$

e)  $x(x - 3)$

f)  $-2y^2(y^2 - 5)$

Example 2: Expand and Simplify. (i.e., Multiply it out then collect like terms.)

a)  $3(x + 2) - 3(-2x + 4)$

b) $x(x + 2) - 3(x^2 + 4)$

c) $2x^2[x - 3(x+4)]$

* Follow BEDMAS and simplify as much as you can inside the brackets before you apply the distributive property.