DISTRIBUTIVE PROPERTY

When we multiply a $(x + y)$ we need to distribute the multiplication of the a to the x and the y

$$a(x+y) = ax + ay$$

Examples: Expand the following:

a) $3(x + 2)$ b) $-5(y - 5)$

c) $(-x + 2)(-5)$ d) $3(x^2 + 4x + 2)$

e) $x(x - 3)$ f) $-2y^2(y^2 - 5)$

Example 2: Expand and Simplify:

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

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

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