

FOIL method - 4/5/2013 www.askmath.weebly.com

FOIL is an acronym for **F**irst, **O**utside, **I**nside, **L**ast. It is useful for us when we try to multiply binomials together. But really it is just part of the distributive property.

Ex. Simplify $(x + 3)(x - 2)$

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

$x \cdot x$ **Multiply the first thing in each binomial**

$-2 \cdot x$ **Multiply the outer thing in each**

$3 \cdot x$ **Multiply the inner thing**

$3 \cdot -2$ **Multiply the last thing**

Then add them up:

$$x^2 - 2x + 3x - 6$$

$$= \boxed{x^2 + x - 6}$$