7-6 Multiplying polynomials

FOIL method

F: the first terms

O: the outer terms

I: The inner terms

L: the last terms

Example:

$$\left(x+3\right)\left(x-2\right)=\left(x\right)\left(x\right)+\left(-2\right)\left(x\right)+\left(3\right)\left(x\right)+\left(3\right)\left(-2\right)$$

$$=x^{2}-2x+3x-6$$

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

Practice:

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