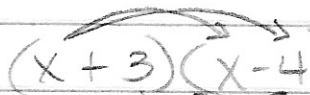
Multiplying Polynomials 7-7

- use the distributive property

Example 1:

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



$$(x)(x) \quad (x)(-4) \quad 3(x) \quad 3(-4)$$

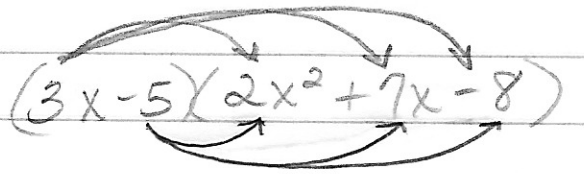
$$x^2 \quad -4x \quad +3x \quad -12$$

$$x^2 - 4x + 3x - 12$$

$$x^2 - x - 12$$

Example 2:

$$(3x-5)(2x^2+7x-8)$$



$$(3x)(2x^2) \quad (3x)(7x) \quad (3x)(-8) \quad (-5)(2x^2) \quad (-5)(7x) \quad (-5)(-8)$$

$$6x^3 \quad 21x^2 \quad -24x \quad -10x^2 \quad -35x \quad +40$$

$$6x^3 \quad 21x^2 - 10x^2 \quad -24x - 35x \quad +40$$

$$6x^3 \quad 11x^2 \quad -59x \quad +40$$

$$6x^3 + 11x^2 - 59x + 40$$