

**9 - 4**

**Multiply a Polynomial  
by a Monomial**

## Distributive Property

$$3(x + 4)$$

$$3x + 12$$

$$-2(x - 6)$$

$$-2x + 12$$

Ex:  $3x(x + 4)$

$$3x^2 + 12x$$

Ex:  $-2x(x^2 - 3x + 11)$

$$-2x^3 + 6x^2 - 22x$$

Ex:  $-n(n^3 + 2n)$

$$-n^4 - 2n^2$$



Homework:

p.409 #1 - 8