

## Warmup

1.)  $16x^2 - 80x$

$$\underline{16x} (1x - 5)$$

2.)  $35x^3 + 10x$

$$5x(7x^2 + 2)$$

3.)  $24x + 144x^2$

$$24x(1 + 6x)$$

4.)  $27x^4y^7z^3 - 63x^2y^8z^4$

$$9x^2y^7z^3(3x^2 - 7yz)$$

# Factoring Trinomials

Section 10.5

# Factoring Trinomials

- ◉ Trinomial is of the form:  $ax^2 + bx + c$
- ◉ Steps: If  $a = 1$ 
  - > Find factors of  $c$  that add to get the  $b$ -term
  - > Fill in the parenthesis using the correct signs



$$2 + 3 = 5$$

$$-2 - 3 = -5$$

Examples (cont.)

$$2 - 3 = -1$$

$$3 - 2 = 1$$

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

$$1.6$$

$$2.3$$

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

$$4.) x^2 - 3x - 18$$

$$(x + 3)(x - 6)$$

$$\begin{array}{l} \cancel{1.8} \\ \cancel{2.7} \\ 3.6 \end{array}$$

## Examples (cont.)

$$5.) x^2 + x - 20$$

$$(x-4)(x+5)$$

1. 20

2. 10

4. 5

$$6.) x^2 - 4x - 32$$

$$(x+4)(x-8)$$

1. 32

2. 16

4. 8

## Class work

- ◉ Blue book page 309 # 1-9
- ◉ If time- pg 311 # 1-9

# HMWK

○ Pg 607# 15-26