

# Day 3

## Warm Up

$$11x^2 + 122x + 11$$

1,11

1,11

$$(1x + 11)(11x + 1)$$

121x  
1x

✓

$$7) \quad 7x^2 - 26x - 8$$

1,7

1,8

2,4

$$(1x + 2)(7x - 4)$$

$\underbrace{\hspace{10em}}_{4x} \quad \underbrace{\hspace{10em}}_{-4x}$

$$(1x + 4)(7x - 2)$$

$\underbrace{\hspace{10em}}_{28x}$

$$9) \quad 6x^2 + 5x - 6$$

1,6

2,3

1,6

2,3

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

$\underbrace{\hspace{10em}}_{6x} \quad \underbrace{\hspace{10em}}_{-6x}$

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

$\underbrace{\hspace{10em}}_{6x} \quad \underbrace{\hspace{10em}}_{-4x}$

**Example 4: Solve a Quadratic Equation**

$$14n^2 + 10n + 2 = -17n - 7$$

$$+17n + 7 + 17n + 7$$

① = 0

$$14n^2 + 27n + 9 = 0$$

② ÷ ?

1,14  
2,7  
1,9  
3,3

③ ( ) ( )

④ x = x =

$$(2x + 3)(7x + 3) = 0$$

$$2x + 3 = 0$$

$$-3 \quad -3$$

$$7x + 3 = 0$$

$$-3 \quad -3$$

$$\frac{2x}{2} = \frac{-3}{2}$$

$$\frac{7x}{7} = \frac{-3}{7}$$

$$x = \frac{-3}{2}$$

$$x = \frac{-3}{7}$$

Solve the quadratic equation.

5)  $12n^2 - 21n + 2 = -8n + 6$

$$+8n - 6 + 8n - 6$$

$$12n^2 - 13n - 4 = 0$$

1,12  
2,6  
3,4

1,4  
2,2

$$(3x + 2)(4x - 2) = 0$$

$$(3x + 4)(4x + 1)$$

$$(3x - 4)(4x + 1)$$

$$(3x - 4)(4x + 1) = 0$$

$$3x - 4 = 0$$

$$\frac{+4}{3} \quad \frac{+4}{3}$$

$$\frac{3x}{3} = \frac{4}{3}$$

$$4x + 1 = 0$$

$$-1 \quad -1$$

$$\frac{4x}{4} = \frac{-1}{4}$$

$$x = \frac{4}{3}$$

$$x = \frac{-1}{4}$$

# 10.6 Day 3

"9.8" wkst #29-38