

## Solving Quadratics - The Zero Product Property

Date \_\_\_\_\_ Period \_\_\_\_\_

**Class Examples: Solve each equation by factoring.**

1)  $(m - 3)(m + 3) = 0$

2)  $(3n - 2)(n - 1) = 0$

3)  $n^2 - 6n = 0$

4)  $m^2 + 3m - 28 = 0$

5)  $x^2 - 3x - 6 = 4$

6)  $r^2 + 5r - 20 = 4$

$$7) 2b^2 + 1 = -3b$$

$$8) 8x^2 + 18x + 5 = 2x + 5x^2$$

**HOMEWORK: Solve each equation by factoring.**

$$9) (2x + 1)(2x + 5) = 0$$

$$10) (7x - 5)(x - 4) = 0$$

$$11) r^2 - 6r + 5 = 0$$

$$12) n^2 + n - 6 = 0$$

$$13) x^2 - 2x = 0$$

$$14) a^2 - 64 = 0$$

$$15) n^2 + 4n - 18 = -6$$

$$16) n^2 - 6n - 5 = -5$$

$$17) 2x^2 + 9x = -9$$

$$18) 4v^2 + 4v = 3$$

$$19) 3m^2 - 7m + 3 = 3m$$

$$20) 4x^2 - 7x = 2x^2 - 6$$