

Solving Quadratics - The Zero Product Property

Date _____ Period _____

Review: Factor Completely - Use the X-Box method when necessary.

1) $x^2 - 8x + 15$

2) $2x^2 - x - 15$

Solve each equation by factoring.

3) $(x - 1)(x - 7) = 0$

4) $(r - 4)(r - 3) = 0$

5) $(k - 6)(k + 6) = 0$

6) $(7r - 3)(3r - 1) = 0$

7) $v^2 + 2v - 3 = 0$

8) $p^2 + 7p + 12 = 0$

$$9) x^2 + 4x - 12 = 0$$

$$10) n^2 - 12n + 32 = 0$$

$$11) x^2 - 3x - 6 = 4$$

$$12) r^2 + 5r - 20 = 4$$

Solve each equation by factoring. - All of these questions require you to show the X-Box method of factoring for credit.

$$13) 4r^2 + 6r - 6 = -2$$

$$14) 2x^2 + 3x - 12 = -3$$

$$15) 4m^2 - 18m + 20 = 2$$

$$16) 4n^2 - 4n - 5 = -2$$

Answers to Solving Quadratics - The Zero Product Property

1)
9) $\{-6, 2\}$

3) $\{1, 7\}$
11) $\{-2, 5\}$

5) $\{6, -6\}$
13) $\left\{\frac{1}{2}, -2\right\}$

7) $\{-3, 1\}$
15) $\left\{\frac{3}{2}, 3\right\}$