

## Solving Quadratics - The Zero Product Property

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

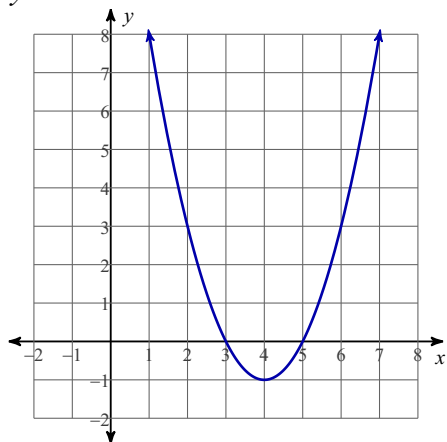
**Factor Completely**

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

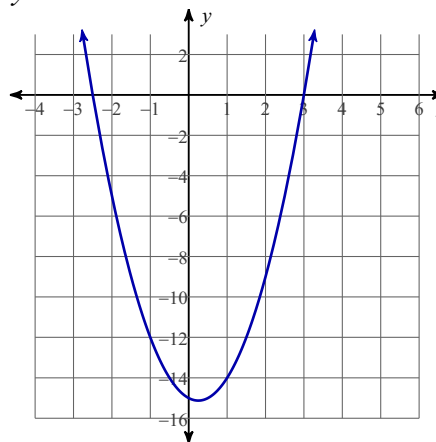
2)  $2x^2 - x - 15$

Looking at the graph below, determine which x-values would make the entire function equal to zero.

3)  $y = x^2 - 8x + 15$



4)  $y = 2x^2 - x - 15$



Solve each equation by factoring.

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

6)  $(3n - 2)(n - 1) = 0$

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

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

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

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

11)  $7n^2 + n - 2 = -2$

12)  $7x^2 - 19x - 10 = -4$

13) Homework: Pg 570-571 #1-3; 8-22

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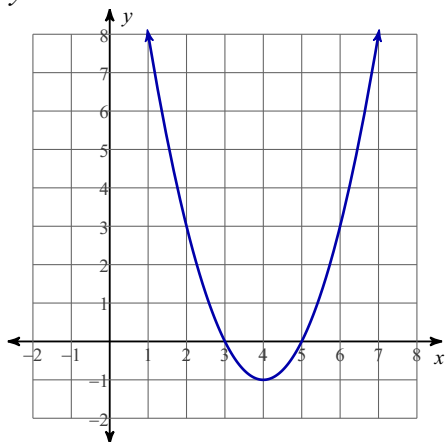
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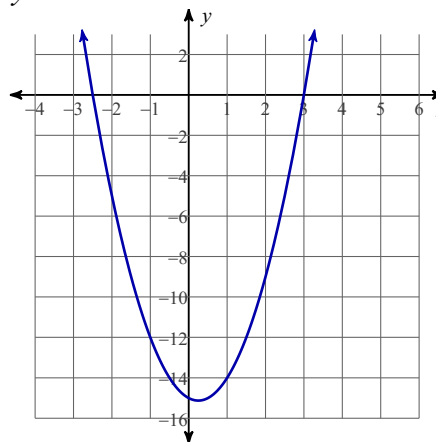
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Solve each equation by factoring.

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

$\{3, -3\}$

6)  $(3n - 2)(n - 1) = 0$

$\left\{\frac{2}{3}, 1\right\}$

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

$\{6, 0\}$

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

$\{-7, 4\}$

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

$\{-2, 5\}$

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

$\{-8, 3\}$

11)  $7n^2 + n - 2 = -2$

$\left\{-\frac{1}{7}, 0\right\}$

12)  $7x^2 - 19x - 10 = -4$

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

13) Homework: Pg 570-571 #1-3; 8-22