

Zeros of Quadratic Functions: Practice.**Solve each equation by factoring.**

1) $n^2 - 7n + 12 = 0$

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

3) $x^2 + 5x = 0$

4) $n^2 - 13n + 40 = 0$

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

6) $v^2 - 10v + 14 = -2$

7) $2n^2 + 7n - 15 = 0$

8) $3x^2 - x - 24 = 0$

$$9) 7x^2 + 13x + 6 = 0$$

$$10) 7r^2 - 26r + 15 = 0$$

Solve each equation with the quadratic formula. State your solutions in exact and approximate form (rounded to two decimal places).

$$11) 6n^2 = 84 - 3n$$

$$12) 7k^2 = 15$$

$$13) r^2 + 10r = 11$$

$$14) 4x^2 - 63 = 4x$$

$$15) 7x^2 - 23 = 0$$

$$16) n^2 - 8n = 13$$

Answers to Zeros of Quadratic Functions: Practice.

1) $\{3, 4\}$
5) $\{-8, 0\}$

9) $\left\{-\frac{6}{7}, -1\right\}$

13) $\{1, -11\}$

16) $\{4 + \sqrt{29}, 4 - \sqrt{29}\}$

2) $\{4, -3\}$
6) $\{8, 2\}$

10) $\left\{\frac{5}{7}, 3\right\}$

14) $\left\{\frac{9}{2}, -\frac{7}{2}\right\}$

3) $\{-5, 0\}$

7) $\left\{\frac{3}{2}, -5\right\}$

11) $\left\{\frac{7}{2}, -4\right\}$

15) $\left\{\frac{\sqrt{161}}{7}, -\frac{\sqrt{161}}{7}\right\}$

4) $\{8, 5\}$

8) $\left\{-\frac{8}{3}, 3\right\}$

12) $\left\{\frac{\sqrt{105}}{7}, -\frac{\sqrt{105}}{7}\right\}$