

## Solving Quadratics with the Quadratic Formula

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

**Solve each equation with the quadratic formula.**

1)  $x^2 - 4x - 12 = 0$

2)  $8v^2 + 8v - 7 = 0$

3)  $2k^2 - 9k + 3 = 0$

4)  $4a^2 + 9a - 63 = 0$

5)  $2x^2 - 15 = 0$

6)  $4r^2 + 6r - 96 = 12$

7)  $5p^2 + 7p - 23 = -7$

8)  $4n^2 - 3n - 21 = -10$

9)  $8a^2 + 8a - 17 = -8$

10)  $v^2 - 6v - 47 = -7$

## Answers to Solving Quadratics with the Quadratic Formula (ID: 1)

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

2)  $\left\{\frac{-2 + 3\sqrt{2}}{4}, \frac{-2 - 3\sqrt{2}}{4}\right\}$

3)  $\left\{\frac{9 + \sqrt{57}}{4}, \frac{9 - \sqrt{57}}{4}\right\}$

4)  $\left\{3, -5\frac{1}{4}\right\}$

5)  $\left\{\frac{\sqrt{30}}{2}, -\frac{\sqrt{30}}{2}\right\}$

6)  $\left\{4\frac{1}{2}, -6\right\}$

7)  $\left\{\frac{-7 + 3\sqrt{41}}{10}, \frac{-7 - 3\sqrt{41}}{10}\right\}$

8)  $\left\{\frac{3 + \sqrt{185}}{8}, \frac{3 - \sqrt{185}}{8}\right\}$

9)  $\left\{\frac{-2 + \sqrt{22}}{4}, \frac{-2 - \sqrt{22}}{4}\right\}$

10)  $\{10, -4\}$