

## Solving Quadratics Test Review #1

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

**Solve each equation by factoring.**

1)  $5a^2 - 20a - 29 = -4$

2)  $x^2 - 2x - 42 = 6$

3)  $3x^2 + 5x - 32 = -4$

4)  $8k^2 - 3k = 5$

**Solve each equation by taking square roots.**

5)  $7v^2 + 10 = 143$

6)  $3k^2 - 10 = 26$

7)  $3(n + 10)^2 = 12$

8)  $-5(x + 4)^2 - 10 = 35$

**Solve each equation by completing the square.**

9)  $x^2 - 16x + 53 = 0$

10)  $3x^2 + 6x - 51 = -6$

11)  $k^2 - 9k + 17 = -3$

12)  $a^2 + 11a - 62 = -2$

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

13)  $x^2 + 7x - 3 = 5$

14)  $-n^2 - 6n + 12 = 3$

## Answers to Solving Quadratics Test Review #1 (ID: 1)

1)  $\{5, -1\}$

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

3)  $\left\{\frac{7}{3}, -4\right\}$

4)  $\left\{-\frac{5}{8}, 1\right\}$

5)  $\{\sqrt{19}, -\sqrt{19}\}$

6)  $\{2\sqrt{3}, -2\sqrt{3}\}$

7)

8)

9)  $\{8 + \sqrt{11}, 8 - \sqrt{11}\}$

10)  $\{3, -5\}$

11)  $\{5, 4\}$

12)  $\{4, -15\}$

13)  $\{1, -8\}$

14)  $\{-3 - 3\sqrt{2}, -3 + 3\sqrt{2}\}$