

## Solving Quadratics Test Review #2

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

**Solve each equation by factoring.**

1)  $2r^2 + 10r - 22 = 6$

2)  $9p^2 + 18p - 1 = -6$

3)  $7n^2 + 11n - 8 = -2$

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

4)  $10x^2 + 10 = 80$

5)  $(x + 4)^2 + 50 = 100$

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

6)  $n^2 + 16n + 28 = 0$

7)  $a^2 + 9a + 8 = -7$

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

8)  $-2v^2 + 7v + 15 = -7$

9)  $5x^2 + 4x + 1 = 3$

**Find the discriminant of each quadratic equation then state the number and type of solutions.**

10)  $-2x^2 - 13 = -8$

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

## Answers to Solving Quadratics Test Review #2 (ID: 1)

1)  $\{-7, 2\}$

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

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

4)  $\{\sqrt{7}, -\sqrt{7}\}$

5)

6)  $\{-2, -14\}$

7)  $\left\{\frac{-9 + \sqrt{21}}{2}, \frac{-9 - \sqrt{21}}{2}\right\}$

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

9)  $\left\{\frac{-2 + \sqrt{14}}{5}, \frac{-2 - \sqrt{14}}{5}\right\}$

10)  $-40$ ; two imaginary solutions

11)  $0$ ; one real solution