

Solving Quadratics Test Review #2

Date _____ Period _____

Solve each equation by factoring.

1) $3x^2 + 9x - 4 = 8$

2) $5p^2 - 24p - 33 = 3$

Solve each equation by taking square roots.

3) $6 - 8v^2 = -26$

4) $\frac{2}{3}(x - 4)^2 + 5 = 9$

Solve each equation by completing the square.

5) $n^2 + 18n + 15 = 0$

6) $p^2 + 3p - 79 = -9$

Solve each equation with the quadratic formula.

7) $2n^2 - 3n + 4 = 3$

8) $8p^2 + 6p - 13 = 3$

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

9) $-2a^2 - 5a + 2 = 2$

10) $2v^2 + 4v + 1 = -3$

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

1) $\{-4, 1\}$

2) $\left\{-\frac{6}{5}, 6\right\}$

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

4)

5) $\{-9 + \sqrt{66}, -9 - \sqrt{66}\}$

6) $\{7, -10\}$

7) $\left\{1, \frac{1}{2}\right\}$

8) $\left\{\frac{-3 + \sqrt{137}}{8}, \frac{-3 - \sqrt{137}}{8}\right\}$

9) 25; two real solutions

10) -16; two imaginary solutions