

9.6 B The Discriminant

Period _____

Find the discriminant of each quadratic equation then state the number of Real Number solutions.

1) $2n^2 - 3n + 3 = 0$

2) $4p^2 + 8p + 4 = 0$

3) $2n^2 - n + 5 = 0$

4) $p^2 - 4p + 4 = 0$

5) $x^2 + 4x + 7 = 3$

6) $3r^2 - 9r + 7 = -3$

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

8) $x^2 - 6x + 15 = 6$

Solve each equation with the quadratic formula.

9) $3r^2 + 7r - 13 = 0$

10) $6r^2 - 6r + 3 = 0$

$$11) \ 2v^2 + 7v - 1 = 0$$

$$12) \ x^2 + 4x + 3 = 0$$

$$13) \ 4a^2 - a + 1 = 0$$

$$14) \ v^2 + 4v + 4 = 0$$

$$15) \ r^2 - 12r + 36 = 0$$