

## Lesson 16.3 WS

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

**Solve each equation with the quadratic formula.(which means find the x-ints, zeros and roots)**

1)  $2n^2 - 11n = 1$

2)  $4k^2 = 26 - 5k$

3)  $11a^2 = 8a + 1$

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

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

5)  $-9n^2 - 3 = -6n$

6)  $n^2 - 6n = -9$

7)  $2n^2 = 9n + 5$

8)  $-10n^2 + 5n = 6$

**Find the vertex of the quadratic.**

9)  $y = -2x^2 - 4x - 6$

10)  $y = 3x^2 - 24x + 45$

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

12)  $y = -x^2 + 6x - 5$