

## 10-6 The Discriminant

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

**Find the discriminant of each quadratic equation then state the number of solutions. If the equation has one or more solutions, use the quadratic formula to find the solution(s).**

1)  $-4n^2 - 8n - 4 = 0$

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

3)  $-5x^2 - 5x - 5 = 0$

4)  $-4p^2 + 8p - 5 = 0$

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

$$6) -m^2 + 4m + 3 = 7$$

$$7) 9x^2 + 5x + 1 = -4$$

$$8) -4b^2 + 4b - 10 = -9$$

$$9) -9b^2 + 6b = 1$$

$$10) x^2 = -4 - 4x$$