Algebra 2

Name_____

# Discriminant & Quadratic Formula

Date_____

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

1) $-b^2 - 2b - 10 = -9$

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

3) $-8k^2 + 3k - 13 = -10$

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

5) $-3b^2 - 4b - 3 = -7$

6) $-6m^2 - 8m - 14 = -7$

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

7) $n^2 + 5n + 6 = 0$

8) $p^2 + 5p - 6 = 0$

9) $10m^2 = 4$

10) $9x^2 = 9 + 7x$

11) $11m^2 - 8 = 8m^2 + 6 + 4m$

12) $10v^2 + 5 - 5v = -5v$