

Quadratic Formula and Discriminant

Date _____ Period _____

Solve each equation with the quadratic formula.

1) $b^2 - 3b - 18 = 0$

2) $x^2 - 5x - 14 = 0$

3) $k^2 - 5k + 6 = 0$

4) $8x^2 = -9$

5) $9x^2 - 7x = -7$

6) $3n^2 + 2 = -8n$

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

7) $-a^2 - 2a - 1 = 0$

8) $-2a^2 + 2 = 0$

9) $-3x^2 - 6x - 3 = 0$

10) $-6x^2 - x + 5 = 0$

11) $-4x^2 = -4$

12) $-3b^2 + b = -2$