

Name:

Date:

Period:

**DIRECTIONS:** Use the quadratic formula to solve each equation. Show all work on separate piece of paper.

1.  $2x^2 - 7x + 3 = 0$

2.  $x^2 - 10x - 9 = 0$

3.  $x^2 = 2(7x - 12)$

4.  $6x^2 + 5x - 4 = 0$

5.  $x^2 - 4x = -1$

6.  $x^2 + 1 + 5x = 0$

7.  $5x^2 - 3x = 7$

8.  $x^2 + 4x = 5$

9.  $7x^2 - 5x - 1 = 0$

10.  $2x^2 + 9x + 4 = 0$

.....  
**Find the number of real solutions of each equation using the discriminant. Show all work on separate piece of paper.**

1.  $x^2 + 4x + 3 = 0$

2.  $x^2 + 2x + 1 = 0$

3.  $x^2 - 4x + 10 = 0$

4.  $x^2 - 6x + 7 = 0$

5.  $x^2 - 2x - 7 = 0$

6.  $x^2 - 10x + 25 = 0$

7.  $2x^2 + 5x - 8 = 0$

8.  $2x^2 + 6x = -12$

9.  $2x^2 = 4x - 10$

10.  $3x^2 + 7x = -3$