

# The Quadratic Formula and the Discriminant Assignment

Evaluate the discriminant of each equation and tell how many solutions each equation has and are the solutions real or imaginary.

1.  $y = x^2 + 10x + 10$

discriminant:

Number of solutions:

Real or Imaginary:

2.  $y = 4x^2 - 4x + 1$

discriminant:

Number of solutions:

Real or Imaginary:

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

discriminant:

Number of solutions:

Real or Imaginary:

4.  $y = x^2 + 3x + 4$

discriminant:

Number of solutions:

Real or Imaginary:

5.  $y = -2x^2 + 3x - 5$

discriminant:

Number of solutions:

Real or Imaginary:

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

discriminant:

Number of solutions:

Real or Imaginary:

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

## The Quadratic Formula and the Discriminant Assignment

Solve each quadratic equation using the quadratic formula.

1.  $x^2 - 15x + 56 = 0$

2.  $3x^2 - 5x + 2 = 0$

3.  $x^2 = 3x + 2$

4.  $x^2 + 9x - 13 = 0$