

Name:

MAC1105 Section 1A26
Quiz 6

Please show all of your work in a NEAT and ORGANIZED fashion.

1. (3 points) Divide and write your answer in standard form $a + bi$.

$$\frac{8 - 6i}{2 - i}$$

2. (3 points) Evaluate the discriminant of the quadratic equation. Use the value of the discriminant to determine whether the quadratic equation has 2 real solutions, 1 repeated real solution, or 2 nonreal complex solutions.

$$16x^2 = 8x - 1$$

3. (4 points) Solve the rational equation.

$$\frac{4}{x + 3} + \frac{x}{x - 5} = 1$$