

NAME:

MATH 103

Quiz 2, 5 September 2008

The following three questions are worth a total of 10 points. The majority of the credit you receive will be based on the completeness and the clarity of your responses. Show your work, and avoid saying things that are untrue, ambiguous, or nonsensical.

1. Solve the following inequality. Express the solution set using interval notation.

$$|1 - 4x| - 7 < -2$$

2. List all intercepts of the graph of the following equation.

$$y = x^2 - 3x - 4$$

3. True or false: $\sqrt{x^2} = |x|$. Explain.