

# **Math 151 - Quiz 1**

August 26, 2015

Name \_\_\_\_\_

Score \_\_\_\_\_

Show all work to receive full credit. Supply explanations when necessary.

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1. (2 points) Is this relation a function? Explain.

$$\{(0, 1), (1, 1), (2, 3), (3, 7), (4, 5), (1, 1)\}$$

2. (2 points) What is the implied domain of the function  $f(x) = 3 + \sqrt{x + 4}$ ?

3. (3 points) Write the relation  $\frac{3x + 5y}{4} = 3$  as a function of  $x$ . Then state the domain and range.

4. (3 points) Compute and simplify  $g(x + a) - g(x)$  for  $g(x) = x^2 + 3x$ .