Name:

MTH-4109-1 Sets, Relations and Functions Quiz

Date:

1. A function is described by the following rule: $f(x) = \frac{-2x}{3} + 5$.

a) Determine over which interval this function is positive.

Answer: _____

b) Determine the rate of change of this function.

Answer: _____

2. A function is described by the following rule: $f(x) = \frac{3x}{2} - 4$.

a) Determine over which interval this function is negative.

Answer: _____

b) Determine the rate of change of this function.

Answer: _____

3. A function is described by the following rule: $f(x) = -x^2 + 9$

a) Determine the interval over which this function is positive.

Answer: _____

b) Determine the interval over which this function is decreasing.

Answer: _____

4. A function is described by the following rule: $f(x) = x^2 - 9$

a) Determine the interval over which this function is negative.

Answer: _____

b) Determine the interval over which this function is decreasing.

Answer: _____