**Math 101\_Homework# 1 : Functions**

**Problem 1:** Simplify: (a)  (b) 

**Problem 2:** If  and 

Find a formula for ** simplifying your answer as far as possible.

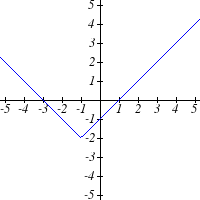
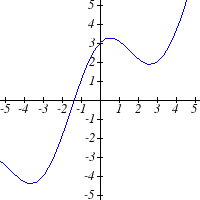
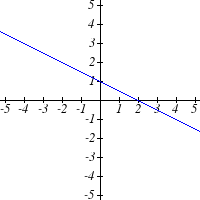
**Problem 3:**  Use the definition of a logarithm to evaluate each of the following.

a) log88 = \_\_\_\_\_ b) log644 = \_\_\_\_\_ c) log1 = \_\_\_\_\_ d) = \_\_\_\_\_

**Problem 4:** Find the domain of the following functions:



**Problem 5:** Select all of the following graphs which are **one-to-one functions**.

a b c 

**Problem 6:** Find the inverse of the following functions:

1.  2. 

**Problem 7: If** . Find:

1. .
2. .