DISCRETE MATH
QUIZ 8

Name:_____

You have 10 minutes for this exam. If you have a question, raise your hand and remain seated. In order to receive full credit your answer must be **complete**, **legible** and **correct**.

1. Define ***function from*** A ***to*** B.

A function from A to B is a relation from A to B satisfying the function rule. (That is, $F \subseteq A \times B$ and for every $a \in A$ there is a unique $b \in B$ such that $(a, b) \in F$.)

2. For each part of this problem give an example of a function $f\colon \mathbb{R} \to \mathbb{R}$ that is:
   (a) injective

   $f(x) = x$

   (b) not injective

   $f(x) = 0$

   (c) surjective

   $f(x) = x$

   (d) not surjective

   $f(x) = 0$