

PRE-CLASS ACTIVITY

Math 1110 - Instructor: Itamar Oliveira

NAME: _____
due next class

- (1) Review section 1.6 up to page 44. You should be familiar with the concepts of one-to-one functions, inverse of functions and properties of logarithms. We will deal with inverses of trigonometric functions later.
- (2) Are the following assignments functions? If they are functions, are they one-to-one?
 - (a) $f : \mathbb{R} \rightarrow \mathbb{R}$, where $f(x) = x^2$.
 - (b) $g : \mathbb{R} \rightarrow \mathbb{R}$, where $g(x) = x^3$.
 - (c) Assigning to each chair in this room the person who sits on it.
 - (d) Assigning to each person in this room the chair they sit on.
 - (e) Assigning to each student in this room the chair they sit on.
 - (f) Assigning to each person in this room their first name.
- (3) Review the algebraic properties of logarithms (sums, differences, change of basis, etc).