

## Math 1050-006 Homework 4

Assigned: 9/26/2012

Due: 10/3/2012

**Please clearly identify which problems you are working on.**

**Please staple all your solutions together and write your name and student id number clearly on the top of the first page.**

### Book Problems:

- 1) Inverse Functions: 1-3, 7-9, 13-20
- 2) n-th Roots: 1-4, 7-10, 14, 15, 18-23, 24-26

### Additional Problems:

- 1) If you are given the graph of a function,  $f(x)$ , and you are told that  $f(x)$  is invertible, can you graph the inverse of  $f(x)$ ? How?
- 2) Does the function,  $f(x) = x^{\frac{1}{n}}$  have an inverse function if  $n$  is even? What does the domain and target of  $f(x)$  and  $f^{-1}(x)$  need to be for the inverse to be a function?