

Name _____

Section A, C, D 10

MA 104, Quiz #3

14 Feb 2008

Instructions: You have 15 minutes to complete this quiz. The quiz is worth 15 points. You are allowed to use your computers or other calculating devices of lesser capability for this quiz. Show all work for full credit. Good luck!

1. Find the absolute maximum and absolute minimum values of f on the given interval.

$$f(x) = x^3 - 3x + 1, \quad [0, 3].$$

For each of the following functions, find:

- (i) The critical points,
 - (ii) The points of inflection,
 - (ii) The relative minima and maxima.
2. $f(x) = x^3$

3. $g(x) = x^4$