

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics

Calculus I

Quiz No. 2A

Monday 22/6/2015

15 Minutes

Instructor: *Dr. Monjed H. Samuh*

Name:

Student ID:

Q1]... [5 points] Suppose $f(x) = x^3 - 8x + 10$. Show that there is a value c for which $f(c) = -\sqrt{3}$.

Q2]... [5 points] Let

$$f(x) = \begin{cases} \sqrt{x+2} & \text{if } 0 \leq x \leq 2 \\ x^3 - 2x & \text{if } x > 2 \end{cases},$$

Is f continuous at $x = 2$? Why? Why not? If not, what kind of discontinuity does it have?

GOOD LUCK