

Department of Mathematics and Statistics, KFUPM

Math-101 Semester-151 QUIZ II

NAME:

S.No.

ID:

Maximum Marks: 8

Section:

Time Allowed: 25 minutes

(1) Evaluate  $\lim_{x \rightarrow 2} \frac{\sqrt{6-x} - 2}{\sqrt{3-x} - 1}$ .

(2) Use the  $\epsilon, \delta$  definition of limit to show that  $\lim_{x \rightarrow 2} \frac{3x^2 - 10x + 8}{x - 2} = 2$ .

(3) Sketch the graph of  $f(x) = x - [x]$ ,  $-3 \leq x < 3$ .