KFUPM Mathematics & Statistics

Term 161 MATH 101 Date: 19/10/2016 Duration: 25 minutes

Quiz#2A

Name:

ID #:

Section:

1. Find an equation of the tangent line to the curve $y = \frac{2x+1}{x+2}$ at (1,1)?

2. Evaluate the limit if it exists. If it does not exist, explain why: $\lim_{x\to\infty} \frac{\sqrt{9x^6-x}}{x^3+1}$

3. Show that the equation $\ln x = 3 - 2x$ has at least one real root.

4. Prove $\lim_{x\to 4} (2x-5) = 3$ using the $\epsilon - \delta$ definition of a limit?