

King Fahd University of Petroleum & Minerals
Department of Mathematics and Statistics
(Semester 181) Math 201 Quiz # 4

Name: _____ I.D. # _____ Sr. # _____

1. Find a linearlization of $f(x, y) = \frac{1 + y}{1 + x}$ at $(1, 3)$.
2. Find the magnitude and direction of the maximum rate of change of $f(x, y, z) = x \ln(yz)$ at $(1, 2, \frac{1}{2})$.