King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 201 - Quiz 5

Name:

Student ID #:

Question 1. Find the critical points of $f(x, y) = x \ln(x + y)$. Then use the "*Second Derivative Test*" to determine whether they are local minima, local maxima, or saddle points (or state that the test fails).

QUESTION 2 IS ON THE BACK OF THE PAGE.

Question 2. Find the point on the surface $z = xy + 1$ closest to the origin.