

KFUPM Term (151) Name _____

MATH 201 Quiz # 5 ID# _____ Section 02

1) Find the linearization of $f(x, y) = e^{-xy} \cos y$ at $(\pi, 0)$.

2) Find the absolute maximum and minimum values of
 $f(x, y) = x^2 + y^2 + x^2y + 4$ on the set $D = \{(x, y): |x| \leq 1, |y| \leq 1\}$.

KFUPM Term (151) Name _____

MATH 201 Quiz # 5 ID# _____ Section 07

1) Find the linearization of $f(x, y) = y + \sin(x/y)$ at $(0, 3)$.

2) Find the absolute maximum and minimum values of
 $f(x, y) = 4x + 6y - x^2 - y^2$
on the set $D = \{(x, y): 0 \leq x \leq 4, 0 \leq y \leq 5\}$.