Name:
October 6, 2016
MAC 2313.6717
Cyr

Quiz 6
You must show all work to receive full credit!!

Problem 1. (5 points) Find an equation of the tangent plane to $f(x, y) = x \sin(x + y)$ at the point $(-1, 1)$, and use it to approximate $f(-0.8, 1.4)$.

Problem 2. (5 points) Let $z = \sqrt{x}e^{xy}$, $x = 1 + uv, y = u^2 - v^2$. Use the chain rule to evaluate the partial derivative $\dfrac{\partial z}{\partial v}$ at the point $(u, v) = (1, 0)$.