

Quiz 4

MAC 2313-01

Spring 2010

Full Name: _____

Score: _____

Show all of your work for full credit.

1. Does the following limit exist? If so, prove that it does:

$$\lim_{(x,y) \rightarrow (0,0)} \frac{x^2 y^3}{2x^2 + y^2}$$

2. Given $f(x, y) = \sqrt{x^2 y + \cos(xy)}$, find $\frac{\partial f}{\partial x}$.