

Math 210 (Lesieutre)
Quiz 4
February 10, 2017

Name: _____

Problem 1. Let $f(x, y) = ye^{xy}$. Compute the partial derivative $\frac{\partial f}{\partial y}$.

We have to use the product rule. There are two factors, y and e^{xy} . Treating x as a constant, we find

$$\frac{\partial f}{\partial y} = (1)(e^{xy}) + (y)(xe^{xy}) = xye^{xy} + e^{xy}.$$