

Quiz 5 MATH 3503 Fall 2018

Compute  $\frac{\partial f}{\partial x}$  and  $\frac{\partial f}{\partial y}$  where  $f(x,y) = e^{x^2 y} + x^3 y^4 + \ln(x+y)$

Soln:

$$\frac{\partial f}{\partial x} = 2xy e^{x^2 y} + 3x^2 y^4 + \frac{1}{x+y}$$

$$\frac{\partial f}{\partial y} = x^2 e^{x^2 y} + 4x^3 y^3 + \frac{1}{x+y}$$