

MATH 251: Practice 8

June 8, 2015

Name: _____

1. Compute $\frac{\partial f}{\partial x}$, $\frac{\partial f}{\partial y}$, $\frac{\partial f}{\partial z}$ for

$$f(x, y, z) = e^{xy} + 2xz^2 + \sin(yz)$$

2. Find g_{xxyz} for the function

$$g(x, y, z) = x^2z + 4x^3y^2z^3 + \sin\left(\frac{2x+1}{y^2}\right) + 3z$$