

## QUIZ 8

Name \_\_\_\_\_

1. For the equation  $f(x, y) = e^{4x} - \sin(y^2) - \sqrt{xy}$  find  $f_{xx}$ ,  $f_{yy}$  and  $f_{xy}$

2. Suppose  $f(x, y) = xy^3 - 4x^2$  with  $x(u, v) = e^{u^2}$  and  $y(u, v) = \sqrt{v^2 + 1}$ . Find  $\frac{\partial f}{\partial u}$  and  $\frac{\partial f}{\partial v}$