

Math 225: Calculus III
Quiz 4 Feb 15/17, 1994

Name: _____

Section: _____

1. Suppose that $z(x, y)$ is a function of x and y , and that $x = \cos(uv)$ and $y = \sin(u/v)$. If $z_x(-1, 0) = 3$ and $z_y(-1, 0) = 1$, find $\frac{\partial z}{\partial v}$ when $u = \pi$ and $v = 1$.

2. Find the slope of the line tangent to curve defined by the intersection of $z = x^3y - y^2$ and the plane $x = 3$ at the point $(3, 2, 50)$.