

Quiz 2
2/9/2023

1. Write the equation of the tangent plane to the surface $z = xy + y^2$ at the point $(-1, 1, 0)$.

2. Let $f(x, y) = \sin(xy)$. Find f_{xy} .

3. Show that $\lim_{(x,y) \rightarrow (0,1)} \frac{x}{x+y-1}$ does not exist by choosing two different paths that lead to two different limits.