

Name:

Section:

Quiz 5

1. Let $f(x, y) = x^2 + y^2$, $x = e^{u+v}$, and $y = uv$. Find $\frac{\partial f}{\partial u}$ as a function of u and v .

2. Find the critical points of $f(x, y) = x^2 + y^2 - xy + x$ and use the Second Derivative Test to determine whether they are local minima or maxima. If the Second Derivative Test is inconclusive, state so.