

MATH 147 Review: Partial Derivatives

1. Let $f(u, v) = u^2 \sin(u + v^3) - \sec(4u) \tan^{-1}(2v)$. Find f_u and f_v .
2. Let $f(x, y) = \frac{x^2}{y^2+1} - \frac{y^2}{x^2+y}$. Find f_x and f_y .