

Name: _____

Problem 1 (10 points)

Compute the partial derivatives f_x and f_y and the second partial derivatives f_{xx} and f_{xy} for $f(x, y) = x^2e^{2y} + xy$.

Problem 2 (10 points)

Find an equation of the tangent plane to the graph of $f(x, y) = 4x^2 + 3xy$ at the point $(1, 2, 10)$.