

Math 3298 Worksheet 8: Maxima and minima with Lagrange multipliers

Group members (1 to 4): _____

- (1) Find the maximum and minimum of the function $f(x, y) = 4xy$ subject to the constraint $4x^2 + y^2 = 8$.

(2) Minimize the distance from the origin to the surface given by $z^2 = xy + 1$.