

Math 201-151

Quiz 6

(B)

Name:.....ID#:.....Sec:.....Ser:.....

Q.1: Use Lagrange multipliers method to find the maximum and minimum values of the function $f(x, y, z) = 4x - y + z$ on the sphere $x^2 + y^2 + z^2 = 18$

Q.2: Use Lagrange multipliers method to find the maximum and minimum values of the function $f(x, y) = x^2 + y^2$ subject to the constraint $x^2 - 2x + y^2 - 4y = 0$