Math 201-153   Quiz 5   (A)

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

Q.1: Find local maximum, local minimum and saddle points for the function

$$f(x,y) = 2x^3 + 2y^3 - 9x^2 + 3y^2 - 12y.$$

Q.2: Find the point on the sphere $x^2 + y^2 + z^2 = 3$ that is farthest from the point $(1, -1, 1)$.