KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS DEPARTMENT OF MATHEMATICS AND STATISTICS MATH 201 - QUIZ 3

Name: Student ID #:

Question 1. Identify the surface $4x^2 - y^2 + 2z^2 + 4 = 0$. Find intervals for the values of k so that the plane y = k intersects with the above surface.

Question 2. Find the equation of the plane containing the line x = 1 + t, y = -2 - t, z = -t and the point (1, 2, 3).

Your Solution.