

King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 201 – Term 182 – Quiz 3

Name:

Student ID #:

Section #: 13

Question 1. Find the distance between the planes $3x + 2y - z = 4$ and $6x + 4y - 2z = 3$.

Question 2. Identify (name, axis, vertex) and sketch the surface

$$-x^2 + 4x + y^2 - 2y - z^2 - 3 = 0$$

SEE THE BACK OF THE PAGE.

Question 3. Find the limit, or show that it does not exist.

$$\lim_{(x,y) \rightarrow (0,0)} \frac{xy \cos y}{x^2 - 2y^2}$$

Question 4. Sketch the domain of $f(x, y) = \arccos(y^2 - x)$.