Math 2513 – Summer 2024

Quiz 1A

Name: Student ID:

1 – What is the definition of a plane? (1)

2 – What are 2 of the 3 possible equations that describe a plane? (2)

3 – Given the equation f(x,y) = 3x + 7y, does the point (0, 4, 5) sit on it? What about the point (1, 2, 47)? (2)

4 – We know that the point (2, -4, -5) sits on the plane that has the normal vector [1,2,3]. What are the three possible equations for describing the plane? (3)

6 – Sketch the level curves for the surface $2x^2 - 3y + 2y^2 - z = 1$. (4)