

Name _____

Sr.# _____

Q1)

The equation of the plane which contains the line

$$L_1 : x = t - 1, \quad y = -2t + 1, \quad z = 2t,$$

and is parallel to the line

$$L_2 : \frac{x}{2} = \frac{y - 2}{-3} = z - 2$$

is

(a) $4x + 3y + z + 1 = 0$

Q2) Describe the level surfaces of the function $f(x, y, z) = y^2 - x^2 - z^2$