

KFUPM Term (112) Name \_\_\_\_\_ Serial# \_\_\_\_\_

MATH 201 Quiz # 2(a) ID# \_\_\_\_\_ Section # 06

Time: 20 Minutes

Marks: / 8

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- 1) Determine whether the lines  $L_1$  and  $L_2$  are intersecting. If so, find their point of intersection.

$$L_1: x = 1 + 4t, \quad y = 5 - 4t, \quad z = -1 + 5t$$

$$L_2: x = 2 + 8t, \quad y = 4 - 3t, \quad z = 5 + t$$

- 2) Identify and draw a rough sketch of the surface  $4x^2 + 4y^2 + z^2 + 8y - 4z = -4$

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MATH 201 Quiz # 2(b) ID# \_\_\_\_\_ Section # 06

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1) Find the distance between the planes:

$$3x - y + 2z = 6$$

$$6x - 2y + 4z = -4$$

2) Use traces to sketch graph of the surface  $16x^2 - 9y^2 + 36z^2 = 144$ .