

Quiz 10

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. §3.4 #6 (2 marks) Use the given equation of a line to find a point on the line and a vector parallel to the line.

$$(x, y, z) = (4t, 7, 4 + 3t)$$

Question 2. §3.3 #31 (4 marks) Using projections find the distance between the point and the line.

$$(2, -5); \quad y = -4x + 2$$

Question 3. §3.3 #40 (4 marks) Find the distance between the given parallel planes.

$$2x - y + z = 1 \text{ and } 2x - y + z = -1$$