

Question 5**(5 marks)**

Consider two planes given by their Cartesian equations:

$$x - 3y + 3z = 9$$

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

- (a) Explain why these planes are not parallel. (1 mark)
- (b) State the geometric interpretation of the solution in the above simultaneous equations. (1 mark)
- (c) Determine the vector equation for the intersection of these two planes. (3 marks)