

Question 5**(6 marks)**

Consider the Cartesian equations for three planes:

$$\begin{aligned}2x + 2y + z &= 9 \\ -2x + 2y - 5z &= -13 \\ y - z &= -1\end{aligned}$$

(a) Show that none of these planes is parallel to another.

(2 marks)

(b) Solve the above equations simultaneously.

(3 marks)

(c) State the geometric interpretation of the solution obtained in part (b).

(1 mark)