

Question 2**(5 marks)**

Plane Π has vector equation $\underline{r} = \begin{pmatrix} 0 \\ 0 \\ 4 \end{pmatrix} + \lambda \begin{pmatrix} 3 \\ 0 \\ 1 \end{pmatrix} + \mu \begin{pmatrix} 1 \\ -1 \\ 2 \end{pmatrix}$.

(a) Determine the normal vector \underline{n} for plane Π .

(3 marks)

(b) Determine the Cartesian equation for plane Π .

(2 marks)