1.
- $A = (1, 3, 1)$
- $B = (2, 1, 1)$
- $C = (3, 4, 1)$
- $a = \overrightarrow{AB} = (1, -2, 0)$
- $b = \overrightarrow{AC} = (2, 1, 0)$
- Ecuación parametrica $= (x, y, z) = \overrightarrow{OP_0} + \alpha \cdot \overrightarrow{u} + \beta \cdot \overrightarrow{v} \Rightarrow$
  $\Pi : (x, y, z) = (1, 3, 1) + \alpha \cdot (1, -2, 0) + \beta \cdot (2, 1, 0), \alpha, \beta \in \Re$

QvQ $A, B, C \in \Pi$

- $(1, 3, 1) = (1, 3, 1) + 0 \cdot (1, -2, 0) + 0 \cdot (2, 1, 0)$
- $(2, 1, 1) = (1, 3, 1) + \alpha \cdot (1, -2, 0) + \beta \cdot (2, 1, 0)$
  - $2 = 1 + \alpha + \beta(2) \overset{\star}{\Rightarrow} 2 = 1 + \alpha + (\alpha(2) - 2)(2) \Rightarrow 2 = 1 + \alpha + \alpha(4) - 4 \Rightarrow 5 = \alpha(5) \Rightarrow \star' : \alpha = 1$
  - $1 = 3 + \alpha(-2) + \beta \Rightarrow \star : \beta = \alpha(2) - 2 \overset{\star'}{\Rightarrow} \beta = 0$
  - $1 = 1$
- $(3, 4, 1) = (1, 3, 1) + 0 \cdot (1, -2, 0) + 1 \cdot (2, 1, 0)$

2.
- $n = a \times b = det\left(\begin{vmatrix} i & j & k \\ 1 & -2 & 0 \\ 2 & 1 & 0 \end{vmatrix}\right) = 0\widehat{i} - 0\widehat{j} + 5\widehat{k} = (0, 0, 5)$
- $\Pi : (0, 0, 5) \cdot (x - 1, y - 3, z - 1) = 0$