

$$\pi) 2x + y + z - 2 = 0 \quad \text{plano} \quad \text{ecuación implícita}$$

$$\eta) \begin{cases} x = 3 + \lambda \\ y = 4 + \lambda \\ z = 1 - 3\lambda \end{cases} \quad \text{recta} \quad \text{ecuaciones paramétricas}$$

$$\lambda = x - 3$$

ecuación implícita de la recta

$$\lambda = y - 4$$

$$x - 3 = y - 4 = \frac{z - 1}{3}$$

$$\lambda = \frac{z - 1}{3}$$

$$\text{intersección} \rightarrow \begin{cases} x - y = -1 & \rightarrow \text{plano 1} \\ 3y - z = 11 & \rightarrow \text{plano 2} \end{cases} \quad \text{recta}$$

$$\begin{cases} 2x + y + z = 2 & \pi \\ x - y = -1 & r \\ 3y - z = 11 & r \end{cases}$$

$$\left(\begin{array}{ccc|c} 2 & 1 & 1 & 2 \\ 1 & -1 & 0 & -1 \\ 0 & 3 & -1 & 11 \end{array} \right) \quad \begin{array}{l} F_1 \leftrightarrow F_2 \\ F_2 \leftarrow F_1 - 2F_2 \end{array}$$

$$\left(\begin{array}{ccc|c} 1 & -1 & 0 & -1 \\ 0 & 3 & 1 & 4 \\ 0 & 3 & -1 & 11 \end{array} \right) \quad \begin{array}{l} \frac{F_1}{3} \\ F_3 \leftarrow F_2 - F_3 \end{array}$$

$$\left(\begin{array}{ccc|c} 1 & -1 & 0 & -1 \\ 0 & 1 & 1/3 & 4/3 \\ 0 & 6 & 2 & -7 \end{array} \right) \quad \frac{F_3}{L}$$

$$\left(\begin{array}{ccc|c} 1 & -1 & 0 & -1 \\ 0 & 1 & 1/3 & 4/3 \\ 0 & 6 & 2 & -7/2 \end{array} \right) \quad \text{S.C.D.}$$

$$\begin{cases} x - y = -1 \\ y + 1/3 z = 4/3 \\ z = -7/2 \end{cases}$$

se intersección en un punto

$$\text{sol}(S) = \left\{ \left(\frac{3}{2}, \frac{15}{6}, -\frac{7}{2} \right) \right\} \quad \checkmark$$

$$y - \frac{7}{6} = \frac{15}{3}$$

$$y = \frac{15}{3} + \frac{7}{6} = \frac{15}{6}$$

$$y = \frac{15}{6}$$

$$x = -1 + y = -\frac{6}{6} + \frac{15}{6} = \frac{9}{6} = \frac{3}{2}$$

$$x = \frac{3}{2}$$