

# 2do semestre 2016 Ej. 2

miércoles, 25 de noviembre de 2020 9:13

↓

$$\left. \begin{aligned} T = (1, 1, 1) &= (0, 1, 1) \\ T = (0, 1, 1) &= (0, -1, 1) \end{aligned} \right\} \rightarrow \text{EXISTEN INFINITAS } T.$$

→  $T = (2, -1, -1) = (0, 5, -1)$  ←

$$\left( \begin{array}{ccc|c} 1 & 0 & 2 & 0 \\ 1 & 1 & -1 & 0 \\ 1 & 1 & -1 & 0 \end{array} \right) \sim \left( \begin{array}{ccc|c} 1 & 0 & 2 & 0 \\ 0 & 1 & -3 & 0 \\ 0 & 0 & 0 & 0 \end{array} \right) \rightarrow \left( \begin{array}{cc|c} 1 & 0 & -2 \\ 0 & 1 & 3 \\ 0 & 0 & 0 \end{array} \right)$$

$$\begin{aligned} (1, 0, 0) &= (1, 1, 1) - (0, 1, 1) \\ T(1, 0, 0) &= T(1, 1, 1) - T(0, 1, 1) \\ &= (0, 1, 1) - (0, -1, 1) \\ \underline{T(1, 0, 0) = (0, 2, 0)} \end{aligned}$$

$$(2, -1, -1) = \alpha (1, 1, 1) + \beta (0, 1, 1)$$

$$\alpha = 2 \rightarrow (2, -1, -1) = 2(1, 1, 1) - 3(0, 1, 1) \leftarrow$$

$$\beta = -3 \quad T(2, -1, -1) = 2T(1, 1, 1) - 3T(0, 1, 1)$$

$$(0, 5, -1) = 2(0, 1, 1) - 3(0, -1, 1) = (0, 5, -1)$$