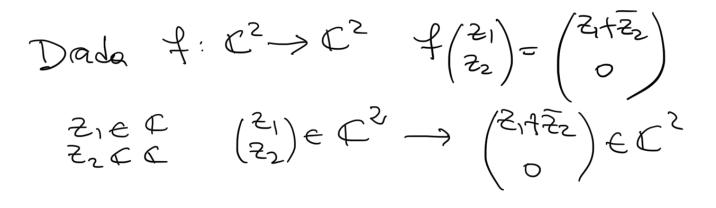


 $= T(X_1 e_1) + T(X_2 e_2) + \cdots + T(X_m e_n)$ $X_1 T(e_1) + X_2 T(e_2) + - - - + X_n T(e_1)$ le llouonus F mos puede que $T \begin{pmatrix} x_1 \\ \vdots \\ x_n \end{pmatrix} = A_T \begin{pmatrix} x_1 \\ \vdots \\ x_n \end{pmatrix}$ La columna A, non les tronstonnades de los cardinas (colculo AT calculatedo T(er),..., Tren) y los coloco como colemnos) Ejerciso (no esté en le pràctice)



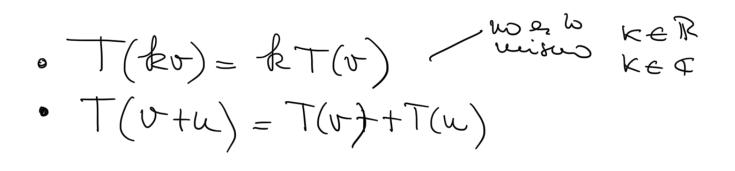
a) Mostra que f mo es t.l. considerando a \mathcal{F}^2 como un especio vectorial con $k = \mathcal{F}$.

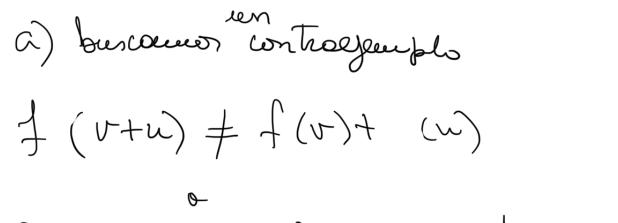
$$f: \mathbb{C}^2 \longrightarrow \mathbb{C}^2 \qquad \begin{pmatrix} z_1 \\ z_2 \end{pmatrix} \longrightarrow \begin{pmatrix} z_1 + \overline{z_2} \\ 0 \end{pmatrix}$$

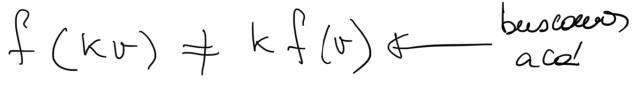
$$a) \quad \mathbb{C}^2 = \frac{1}{2} \begin{pmatrix} z_1 \\ z_2 \end{pmatrix} \quad \text{wn} \quad z_1 \in \mathbb{C}, z_2 \in \mathbb{C} \end{pmatrix}$$

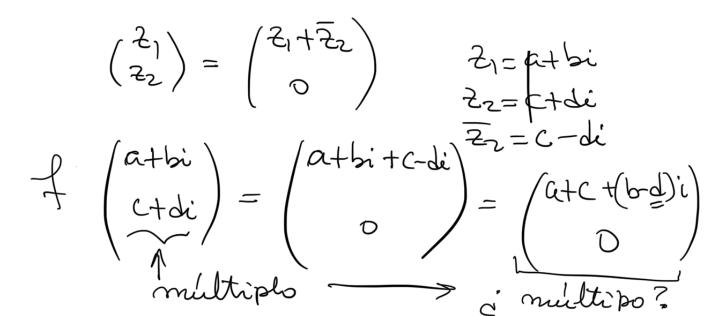
$$\begin{pmatrix} 2+3i\\ -i \end{pmatrix} \in \mathbb{C}^2$$

C² la podeens peulos como un C-ev o como un TR-EV







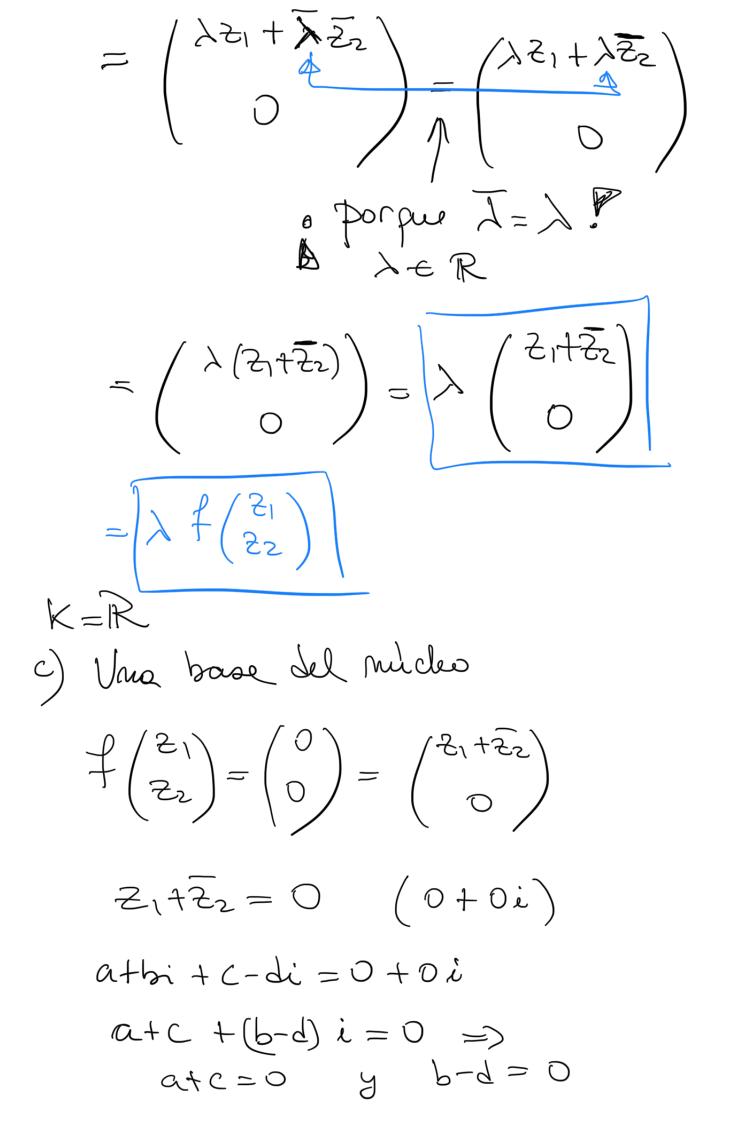


 $f\left(\begin{array}{c}0\\1\end{array}\right) = \begin{pmatrix}1\\0\end{array}$ 0+1=0+1=1 $\dot{\lambda} = -\dot{\iota}$ $f\left(\begin{smallmatrix}i\\i\\i\end{smallmatrix}\right) = f\left(\begin{smallmatrix}i\\i\\i\end{smallmatrix}\right) = \begin{pmatrix}0+i\\0\end{smallmatrix}\right) = \begin{pmatrix}-i\\0\end{pmatrix}$ i e C $\begin{aligned} \varphi\left(\begin{smallmatrix}0\\1\end{smallmatrix}\right) &= \begin{pmatrix}0\\0\end{smallmatrix}\right) \\ \varphi\left(\begin{smallmatrix}i\\0\end{smallmatrix}\right) \\ \varphi\left(\begin{smallmatrix}i\\0\end{smallmatrix}\right) &= \begin{pmatrix}-i\\0\end{smallmatrix}\right) \\ \varphi\left(\begin{smallmatrix}i\\0\end{smallmatrix}\right) \\ \varphi\left(\begin{smallmatrix}$ $\begin{pmatrix} \ell \\ 0 \end{pmatrix}$ Resulto que 1 no es T.L. SJ resources como porquetros neureur complejos (es decin, si penseuros a C2. como un espacio vectorial sobre el cuerpo () b) $f\left(\frac{21}{22}\right) = \left(\frac{21+22}{0}\right)$ C como R-es.

$$Z_{1} = atbi
Z_{2} = ctdi
Teremo pre denostron pre
a si $u \in C^{2}$ y $r \in C^{2} = 2$

$$f(u+v) = f(u+v)$$
a si $u \in C^{2}$ y $A \in \mathbb{R}$

$$f(u+v) = \lambda f(w)$$$$



$$\begin{aligned} & (z = -a) \\ & d = b \end{aligned}$$

$$\begin{aligned} & (z_{2}) = (a + bi) \\ & (-a + bi) = a (-1) + b (i) \\ & (i) \\ & f = gan - (-1) + b (i) \\ & f = gan - (-1) + b (i) \\ & f = gan - (-1) + b (i) \\ & f = f \\ & Nu(f) = gan - (-1) + b (i) \\ & Son - (i)$$

$$B_{c^{2}} = \frac{1}{2} \left(\begin{array}{c} 1\\ 0 \end{array}\right) \left(\begin{array}{c} 0\\ 0 \end{array}\right) \left(\begin{array}{c} 1\\ 0 \end{array}\right) \left$$