LARISA
GRUPA 141

Tema 6

$(\mathbb{R}^3, (\mathbb{R}^3, g_0), P_0)$

a) EC. PLAN $\overline{\pi}$ DETERMINAT DE $O(0,0,0), A(1,0,2), B(1,1,1)$

b) $\Delta_1: \dfrac{x_1-1}{2} = \dfrac{x_2+2}{-3} = \dfrac{x_3-5}{4} = t$

$\Delta_2: \begin{cases} x_1 = 3t+7 \\ x_2 = 2t+2 \\ x_3 = -2t+1 \end{cases}$

EC. PLAN $\overline{\pi}$ CARE TRECE PRIN Δ_1 ŞI $\overline{\pi} \parallel \Delta_2$.

a) $\overline{\pi}: \begin{vmatrix} X & Y & Z & 1 \\ 0 & 0 & 0 & 1 \\ 1 & 0 & 2 & 1 \\ 1 & 1 & 1 & 1 \end{vmatrix} = 0$

$1 \cdot (-1)^{2+4} \cdot \begin{vmatrix} X & Y & Z \\ 1 & 0 & 2 \\ 1 & 1 & 1 \end{vmatrix} = Z + 2Y - 2X - Y = -2X + Y + Z = 0 \Rightarrow$

$\Rightarrow \overline{\pi}: -2X + Y + Z = 0$

b) $\Delta_1: \begin{cases} x_1 = 2t+1 \\ x_2 = -3t-2 \\ x_3 = 4t+5 \end{cases} \Rightarrow M(1,-2,5) \in \Delta_1$
$\quad \mu_{\bar{F}}(2,-3,4)$

$\Delta_2: \dfrac{x_1-7}{3} = \dfrac{x_2-2}{2} = \dfrac{x_3-1}{-2} = t' \Rightarrow \mu_2 = (3,2,-2)$

$\overline{\pi}: \begin{vmatrix} x_1-1 & 2 & 3 \\ x_2+2 & -3 & 2 \\ x_3-5 & 4 & -2 \end{vmatrix} = (x_1-1)\begin{vmatrix} -3 & 2 \\ 4 & -2 \end{vmatrix} - (x_2+2)\begin{vmatrix} 2 & 3 \\ 4 & -2 \end{vmatrix} + (x_3-5)\begin{vmatrix} 2 & 3 \\ -3 & 2 \end{vmatrix} =$

$= -2x_1 + 2 + 16x_2 + 32 + 13x_3 - 65 = 0$

$\overline{\pi}: -2x_1 + 16x_2 + 13x_3 - 31 = 0$