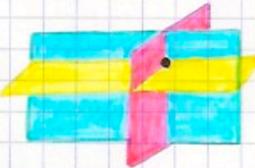
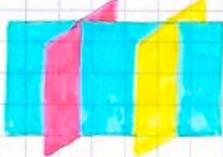
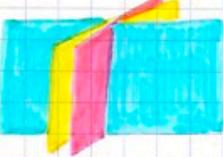
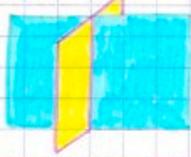
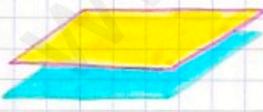
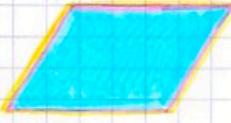


POSICIÓN RELATIVA DE TRES PLANOS

CRISTINA FERNÁNDEZ ORTS

2º BAT. B

DIBUJO	TIPO	SISTEMA	RANGOS
	SE CORTAN EN UN PUNTO	SCD	$Rg(M) = 3$ $Rg(M^*) = 3$
	SE CORTAN DOS A DOS	SI	$Rg(M) = 2$ $Rg(M^*) = 3$
	DOS PLANOS PARALELOS CORTAN AL TERCERO	SI	$Rg(M) = 2$ $Rg(M^*) = 3$
	NO COINCIDENTE Y SE CORTAN EN UNA RECTA	SCI	$Rg(M) = 2$ $Rg(M^*) = 2$
	DOS PLANOS COINCIDENTES CORTAN AL TERCERO	SCI	$Rg(M) = 2$ $Rg(M^*) = 2$
	TRES PLANOS PARALELOS	SI	$Rg(M) = 1$ $Rg(M^*) = 2$
	DOS PLANOS COINCIDENTES Y PARALELOS AL TERCERO	SI	$Rg(M) = 1$ $Rg(M^*) = 2$
	TRES PLANOS COINCIDENTES	SCI	$Rg(M) = 1$ $Rg(M^*) = 1$

$$\begin{aligned} \pi_1: A_1X + B_1Y + C_1Z + D_1 &= 0 \\ \pi_2: A_2X + B_2Y + C_2Z + D_2 &= 0 \\ \pi_3: A_3X + B_3Y + C_3Z + D_3 &= 0 \end{aligned}$$

$$\rightarrow M^* = \begin{pmatrix} A_1 & B_1 & C_1 & D_1 \\ A_2 & B_2 & C_2 & D_2 \\ A_3 & B_3 & C_3 & D_3 \end{pmatrix}$$

M