

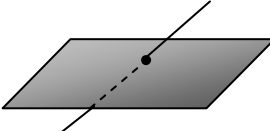


$$2 \text{ PLANOS: } \left. \begin{array}{l} \pi : ax + by + cz + d = 0 \\ \pi' : a'x + b'y + c'z + d' = 0 \end{array} \right\}$$

rg M	rg M*	POSICIÓN RELATIVA	
2	2		SECANTES (se cortan en una recta)
1	2		PARALELOS
1	1		COINCIDENTES

$$3 \text{ PLANOS: } \left. \begin{array}{l} \pi : ax + by + cz + d = 0 \\ \pi' : a'x + b'y + c'z + d' = 0 \\ \pi'' : a''x + b''y + c''z + d'' = 0 \end{array} \right\}$$

rg M	rg M*	POSICIÓN RELATIVA	
3	3		SE CORTAN EN UN PUNTO
2	3	(prisma triangular)	SE CORTAN DOS A DOS
2	2		HAZ DE PLANOS SECANTES (se cortan en una recta)
1	2		PARALELOS
1	1		COINCIDENTES

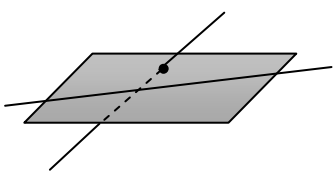
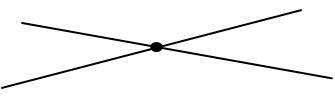
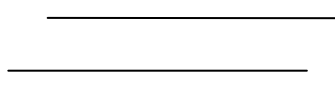
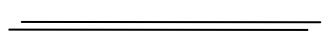
$$\text{RECTA-PLANO: } \left. \begin{array}{l} r: ax+by+cz+d=0 \\ a'x+b'y+c'z+d'=0 \\ \pi: a''x+b''y+c''z+d''=0 \end{array} \right\}$$

rg M	rg M*	POSICIÓN RELATIVA	
3	3		SECANTES (se cortan en un punto)
2	3		PARALELOS
2	2		RECTA CONTENIDA EN EL PLANO

$$\left. \begin{array}{l} r: ax+by+cz+d=0 \\ a'x+b'y+c'z+d'=0 \\ s: a''x+b''y+c''z+d''=0 \\ a'''x+b'''y+c'''z+d'''=0 \end{array} \right\}$$

2 RECTAS:

$$\left. \begin{array}{l} r: \vec{x} = A_r + \lambda \vec{u}_r \\ s: \vec{x} = A_s + \lambda \vec{u}_s \end{array} \right\}$$

rg M	rg M*	POSICIÓN RELATIVA		rg(u _r ,u _s)	rg(u _r ,u _s ,A _r ,A _s)
3	4		SE CRUZAN	2	3
3	3		SE CORTAN	2	2
2	3		PARALELAS	1	2
2	2		COINCIDENTES	1	1