

⑤ $A(1, 2, 3)$ punto

Planos:

$$x + y + 2z = 5 \quad \left\{ \quad 3x + y + z = 6 \right.$$

$$y = 5 - x - 2z \quad \left\{ \quad y = 6 - 3x - z \right.$$

$$5 - x - 2z = 6 - 3x - z$$

$$-x - 2z + 3x + z = 6 - 5$$

$$2x - 1z = 1$$

$$-1z = 1 - 2x$$

$$z = \frac{1 - 2x}{-1}$$

$$z = -(1 - 2x)$$

$$z = -1 + 2x$$

$$x = t$$

$$x = t$$

$$y = 5 - t - 2(-1 + 2t)$$

$$y = 5 - t + 2 - 4t$$

$$y = 7 - 5t$$

$$z = -1 + 2t$$

$$(t, 7 - 5t, -1 + 2t)$$

Intersección
es una recta
cuya
parametrización

Ecuación vectorial

$$X = (0, 7, -1) + \lambda(1, -5, 2)$$

$$\vec{u} = K \cdot \vec{v} \quad \text{Rectas paralelas}$$

$$\vec{u} = (1, -5, 2) = K(-1, 5, -2)$$

Ecuación vectorial

$$X = (1, 2, 3) + \lambda(-1, 5, -2)$$

$$X = a_1 + t v_1$$

$$y = a_2 + t v_2$$

$$z = a_3 + t v_3$$

$$X = 1 + -1t$$

$$y = 2 + 5t$$

$$z = 3 + -2t$$

$$X = 1 - t$$

$$y = 2 + 5t$$

$$z = 3 - 2t$$

$$(1-t, 2+5t, 3-2t)$$

Parametrización
de la recta
paralela en el
punto A