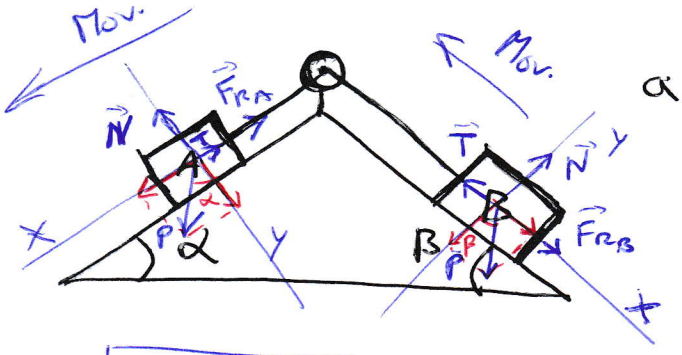
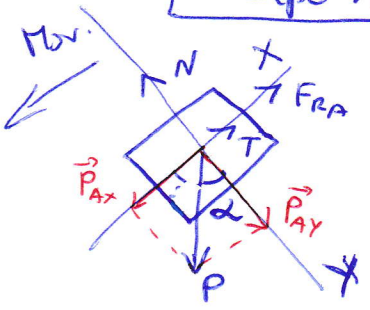


$a = ?$

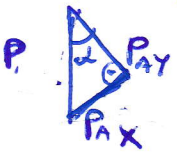
Asignamos de forma arbitraria el movimiento.

Cuerpo A



$$\Sigma F_x = P_{Ax} - F_{RA} - T = m_A \cdot a \quad (1)$$

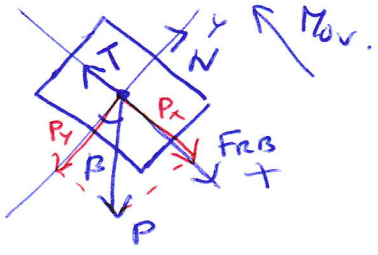
$$\Sigma F_y = N_A - P_{AY} = 0$$



$$P_{AY} = P_A \cdot \cos\alpha$$

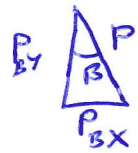
$$P_{AX} = P_A \cdot \operatorname{sen}\alpha$$

Cuerpo B



$$\Sigma F_x = T - F_{RB} - P_{Bx} = m_B \cdot a \quad (2)$$

$$\Sigma F_y = N_B - P_{BY} = 0$$



$$P_{Bx} = P_B \cdot \operatorname{sen}\beta$$

$$P_{BY} = P_B \cdot \cos\beta$$

Del cuerpo A

$$\left.\begin{aligned} P_A \operatorname{sen}\alpha - \mu \cdot N_A - T &= m_A \cdot a \\ N_A = P_{AY} &= P_A \cos\alpha \end{aligned}\right\} \; P_A \operatorname{sen}\alpha - \mu P_A \cos\alpha - T = m_A \cdot a$$

Del cuerpo B

$$\left.\begin{aligned} T - \mu \cdot N_B - P_B \operatorname{sen}\beta &= m_B \cdot a \\ N_B = P_{BY} &= P_B \cdot \cos\beta \end{aligned}\right\} \; T - \mu \cdot P_B \cos\beta - P_B \operatorname{sen}\beta = m_B \cdot a$$

sumamos

$$P_A \operatorname{sen}\alpha - \mu P_A \cos\alpha - \cancel{T} + \cancel{T} - \mu P_B \cos\beta - P_B \operatorname{sen}\beta = m_A \cdot a + m_B \cdot a$$

$$a = \frac{P_A \operatorname{sen}\alpha - \mu P_A \cos\alpha - \mu P_B \cos\beta - P_B \operatorname{sen}\beta}{(m_A + m_B)}$$

Si cuando nos dan datos obtenemos una aceleración negativa hay que rehacer el problema suponiendo que se mueven en el otro sentido.