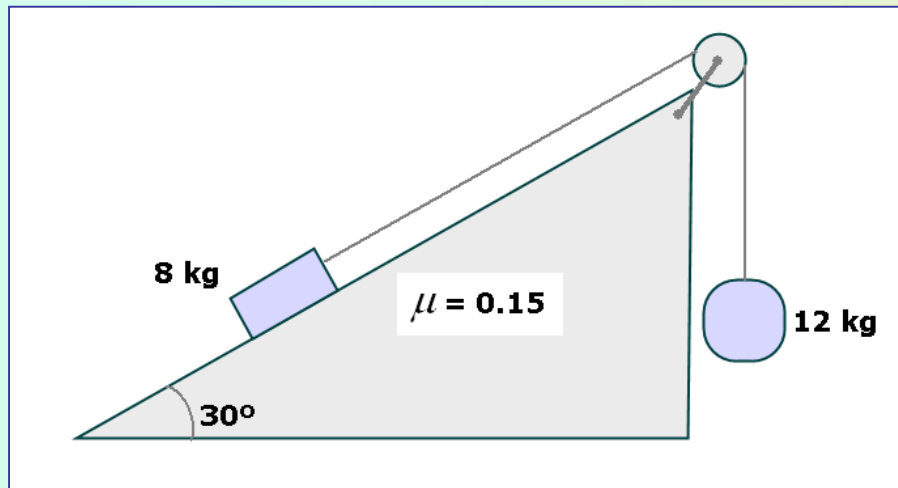


# Plano inklinatua: ariketa

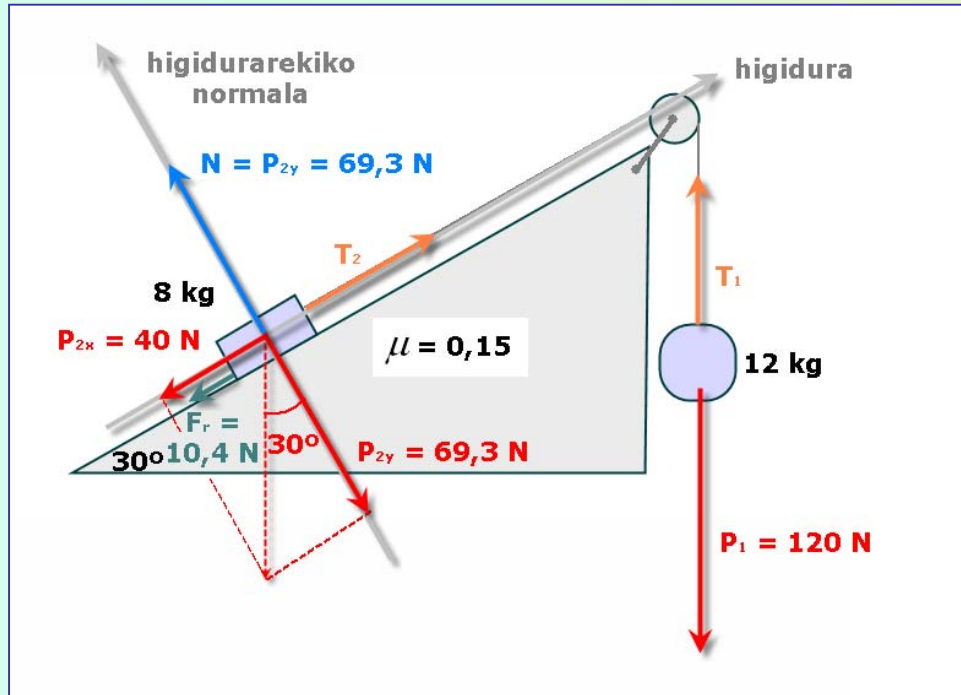
## Ariketa

Irudiko kasuan, kalkulatu

- sistemaren azelerazioa
- tentsioen balioa



# Plano inklinatua: ariketa



Indarren kalkulua, ardatz normalean:

$$F_{\text{tot (normal)}} = 0 = N - P_{2y}$$

$$N = P_{2y} = P_2 * \cos 30^\circ =$$

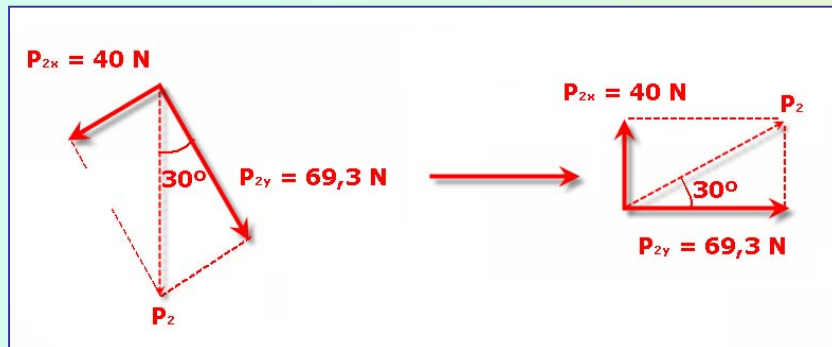
$$= 80 \text{ N} * \cos 30^\circ = 69,3 \text{ N}$$

Indarren kalkulua, higiduraren ardatzean:

$$P_{2x} = P_2 * \sin 30^\circ = 80 \text{ N} * \sin 30^\circ = 40 \text{ N}$$

$$F_r = \mu * N = 0,15 * 69,3 \text{ N} = 10,4 \text{ N}$$

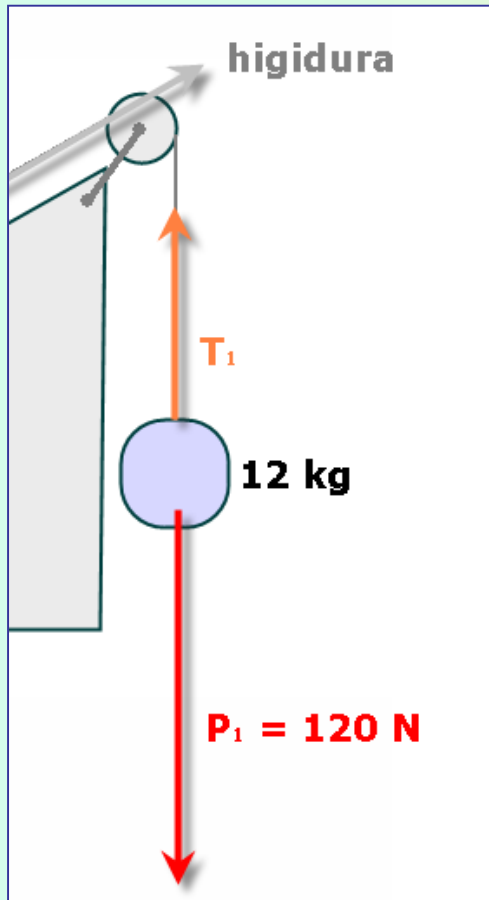
Sistemaren azelerazioaren kalkulua (2. legearen aplikazioa sistema osoari):



$$F_{\text{tot}} = 120 \text{ N} - \cancel{T_1} + \cancel{T_2} - 40 \text{ N} - 10,4 \text{ N} = 20 \text{ kg} * a$$

$$a = \frac{69,6 \text{ N}}{20 \text{ kg}} = 3,48 \frac{\text{m}}{\text{s}^2}$$

# Plano inklinatua: ariketa



Tentsioen kalkulua (2. legearen aplikazioa gorputz bakar bati):

$$F_{\text{tot}} = 120 \text{ N} - T_1 = 12 \text{ kg} * 3,48 \frac{\text{m}}{\text{s}^2} = 41,8 \text{ N}$$

$$T_1 = T_2 = 78,2 \text{ N}$$