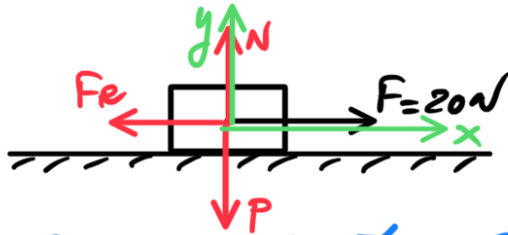


### EJERCICIO FQ34EE2577:



$$\begin{aligned} \mu &= 0.1 \\ m &= 25 \text{ kg} \\ g &= 9.8 \text{ m/s}^2 \end{aligned} \quad a = ?$$

2ª Ley de Newton Eje x:

$$\boxed{\sum F_x = m \cdot a}$$

$$F - F_R = m \cdot a$$

$$20 - \mu \cdot N = 25 \cdot a \Rightarrow$$

$$20 - 0.1 \cdot 245 = 25 \cdot a$$

$$20 - 24.5 = 25 \cdot a$$

$$-4.5 = 25 \cdot a$$

$$\frac{-4.5}{25} = a \Rightarrow \boxed{a = -0.18 \text{ m/s}^2}$$

*¡No se mueve!*

2ª Ley de Newton Eje y:

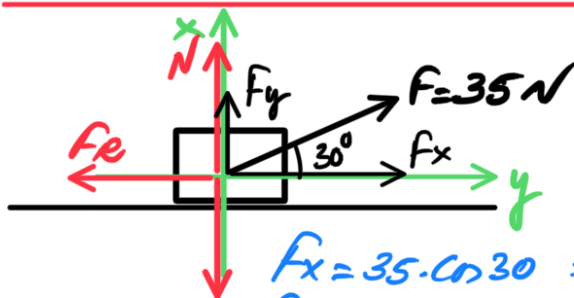
$$\boxed{\sum F_y = 0}$$

$$N - P = 0 \Rightarrow N = P = m \cdot g$$

$$N = 25 \cdot 9.8$$

$$\boxed{N = 245 \text{ N}}$$

### EJERCICIO FQ34EE2578:



$$\begin{aligned} m &= 17 \text{ kg} \\ \mu &= 0.1 \\ g &= 9.8 \text{ m/s}^2 \\ \alpha &= 30^\circ \end{aligned} \quad a = ?$$

$$F_x = 35 \cdot \cos 30 = 30.31 \text{ N}$$

$$F_y = 35 \cdot \sin 30 = 17.5 \text{ N}$$

Eje x:  $\boxed{\sum F_x = m \cdot a}$

$$F_x - F_R = m \cdot a$$

$$30.31 - \mu \cdot N = 17 \cdot a$$

$$30.31 - 0.1 \cdot 149.1 = 17a$$

$$30.31 - 14.91 = 17a$$

$$15.4 = 17a$$

$$a = \frac{15.4}{17}$$

$$\boxed{a = 0.91 \text{ m/s}^2}$$

Eje y:  $\boxed{\sum F_y = 0}$

$$N + F_y - P = 0$$

$$N = P - F_y$$

$$N = m \cdot g - 17.5$$

$$\boxed{N = 17 \cdot 9.8 - 17.5 = 149.1 \text{ N}}$$