

# SOLUCIÓN EJERCICIO 8

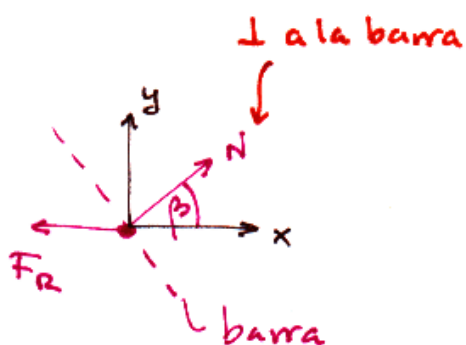
i)



$$T = (M + 2m)a$$

$$a = \frac{T}{M + 2m}$$

ii) DCL anillo



$$x) \quad N \cos \beta - F_R = 0 \quad (1)$$

$$y) \quad N \sin \beta = ma$$

$$\Rightarrow \quad N = \frac{ma}{\sin \beta}$$

$$N = \frac{m}{M + 2m} \frac{T}{\sin \beta} \quad (2)$$

iii) USANDO (1) y (2)

$$N \cos \beta - k \Delta = 0$$

$$\Delta = \frac{N \cos \beta}{k} = \frac{m T}{M + 2m} \frac{1}{k \tan \beta}$$

$$\therefore \text{DISTANCIA} = D = L + \Delta$$