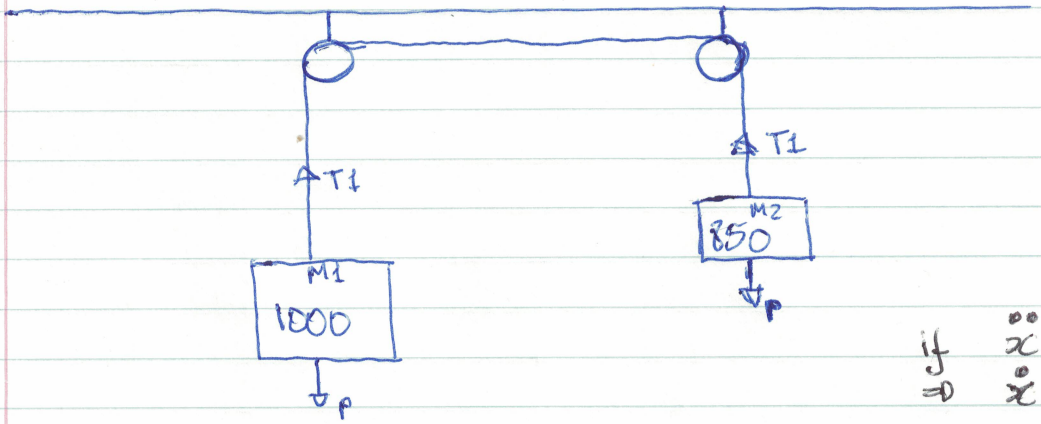

if $\ddot{x} = K$

$\Rightarrow \dot{x} = Kt$

$\Rightarrow x = \frac{1}{2} K t^2$

$$\boxed{\Sigma F_R = M \ddot{x}}$$

$P = m \cdot g$

M1: $P_1 - T_1 = M_1 \ddot{x}$

M2: $P_2 - T_1 = M_2 \ddot{x}$

$$(P_1 - P_2) + (-T_1 + T_1) = M_1 \ddot{x} + M_2 \ddot{x}$$

$$P_1 - P_2 = (M_1 + M_2) \ddot{x}$$

$$\ddot{x} = \frac{P_1 - P_2}{M_1 + M_2} = \frac{(1000 \cdot 9{,}8) - (850 \cdot 9{,}8)}{1000 + 850}$$

$$= \frac{(1000 - 850) \cdot 9{,}8}{1000 + 850}$$

$$\therefore \quad \ddot{x} = \frac{1000 - 850}{1000 + 850} \times g$$

$$= 8{,}5\,\% \times 9{,}8$$

$$\approx 0{,}8 \ (m/s^2)$$

every second that passes by the speed is incremented by 0,8 (m/s).

M_1 1000 ↓ $\ddot{x} = 0{,}8 \ [m/s^2]$

$$x = \frac{1}{2} \ddot{x} t^2$$

parabolic motion behavior.