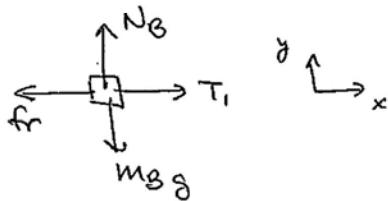


:::: SOLUCIÓN EJERCICIO 11 :::: FÍSICA I :::: 22 Enero 2008
:::: Profesor: Andrés Meza

* Situación 1

DCL B

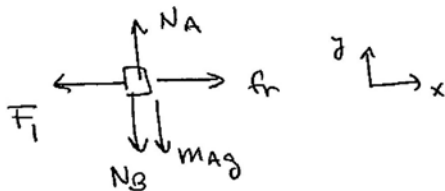


$$\hat{x}) T_1 - f_r = 0$$

$$\hat{y}) N_B - m_B g = 0 \Rightarrow N_B = m_B g$$

$$f_r = \mu N_B = \mu m_B g$$

DCL A



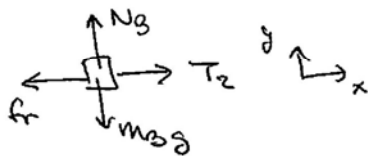
$$\hat{x}) f_r - T_1 = 0$$

$$\hat{y}) N_A - N_B - m_A g = 0$$

$$\therefore T_1 = f_r = \mu m_B g$$

* Situación 2

DCL B

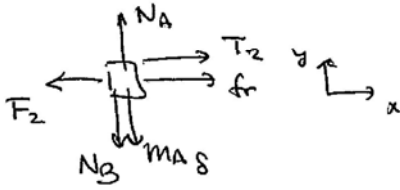


$$\hat{x}) T_2 - f_r = 0 \Rightarrow T_2 = f_r$$

$$\hat{y}) N_B - m_B g = 0$$

$$f_r = \mu N_B = \mu m_B g$$

DLL A



$$\hat{x}) T_2 + f_r - F_2 = 0$$

$$\hat{y}) N_A - N_B - mAg = 0$$

$$\Rightarrow F_2 = T_2 + f_r = 2f_r$$

$$F_2 = 2\mu m_B g$$

∴

$$\frac{F_1}{F_2} = \frac{\mu m_B g}{2\mu m_B g} = \frac{1}{2}$$

NO DEPENDE DE
LA MASA DE LOS
BLOQUES