

$$E_k = \frac{1}{2} m v^2 \quad \tan \theta_B = \frac{v_2}{v_1} = v_{21} \quad pV = nRT \quad \vec{\psi} = \iint \vec{D} d\vec{S} = AD \quad H_\lambda = \frac{\Delta M_e}{\Delta \lambda}$$

$$-\frac{\hbar^2}{2m} \frac{d^2 \psi}{dx^2} + V\psi = E\psi \quad M_e = \sigma T^4 \quad \Phi_e = \frac{L}{4\pi r^2} \quad \int \frac{\Delta \varphi}{2\pi} = \frac{\Delta x}{\lambda_1} = \frac{x_2 - x_1}{\lambda_2} \quad V = c/\lambda \quad \Phi = NBS$$

$$U_{ef} = \frac{U_m}{E} \quad E = \hbar \omega \quad \Delta t = \frac{\Delta t'}{\sqrt{1 - \frac{v^2}{c^2}}} \quad X_L = \frac{U_m}{I_m} = \omega L = 2\pi f L \quad F = \frac{m_1 m_2}{r^2} \quad \mathcal{H}$$

$$\vec{B} = \mu \frac{NI\sqrt{2}}{2\pi r m_e} \quad v = \frac{\omega \hbar}{2\pi r m_e} \quad \Phi_E = \frac{E_e}{\Phi_0} = k \frac{\Phi}{r^2} \quad \Phi = |\varphi_A - \varphi_B| \quad T = \frac{4 n_1 n_2}{(n_2 + n_1)^2} \quad g = \frac{m_1 m_2}{r^2} \quad \mathcal{H}$$

$$k = \rho^2 / 2m \quad m_o = \frac{M_m}{N_A} = \frac{M_r \cdot 10^{-3}}{N_A} \quad \lambda = \frac{h}{\sqrt{2eUm_e}} \quad R = \rho \frac{\ell}{S}$$

$$f_o = \frac{1}{2\pi} \sqrt{\frac{g}{\ell}} \quad \psi(x) = \sqrt{2/L} \sin \frac{n\pi x}{L}$$

$$\oint \vec{B} d\vec{\ell} = \mu \iint_S \vec{J} d\vec{S} \quad \vec{S} =$$

$$C(s) \quad v_k = \sqrt{\frac{3kT}{m_o}} = \sqrt{\frac{3kTN_A}{M_m}} = \sqrt{\frac{3R_m T}{M_r \cdot 10^{-3}}}$$

$$\lambda = \frac{\ln 2}{T} \quad F_h = Sh\rho g$$

$$\left(\frac{E_t}{E_o} \right)_{\parallel} = \frac{2 \cos \theta_1 \cos \theta_2}{\cos(\theta_1 - \theta_2) \sin(\theta_1 + \theta_2)}$$

$$E_y = E_o \sin(kx - \omega t) \quad R = R_o \sqrt[3]{A} \quad c(s) \rightarrow s \rightarrow \omega = U_m \sin \omega(t - \tau) = U_m \sin 2\pi \left(\frac{t}{T} - \frac{x}{\lambda} \right)$$

Trabajo #3

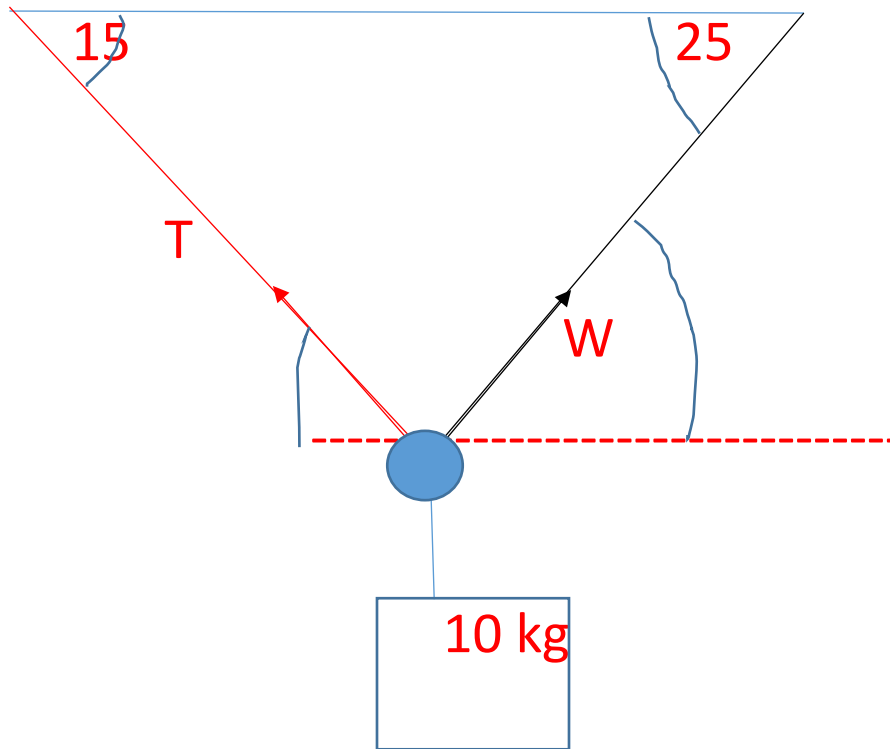
Física-Matemática

Andrés Montenegro

UTC

TAREA 3

CALCULAR LAS TENSIONES T y W



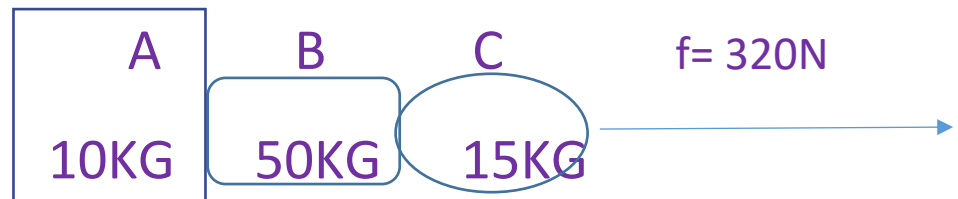
RESPUESTA:

$$T = 14$$

$$W = 15$$

ACELERACION DEL SISTEMA

FUERZAS ENTRE ELLAS



RESPUESTA:

$$F = ma$$

$$320\text{N} = 75\text{KG} \cdot a$$

$$320\text{N}/75\text{KG} = 4.26\text{m/s}^2$$