EJERCICIO

Alejandra Monserrath Aguilar Gómez

Momentos e inercia de una superficie

Parcial 4

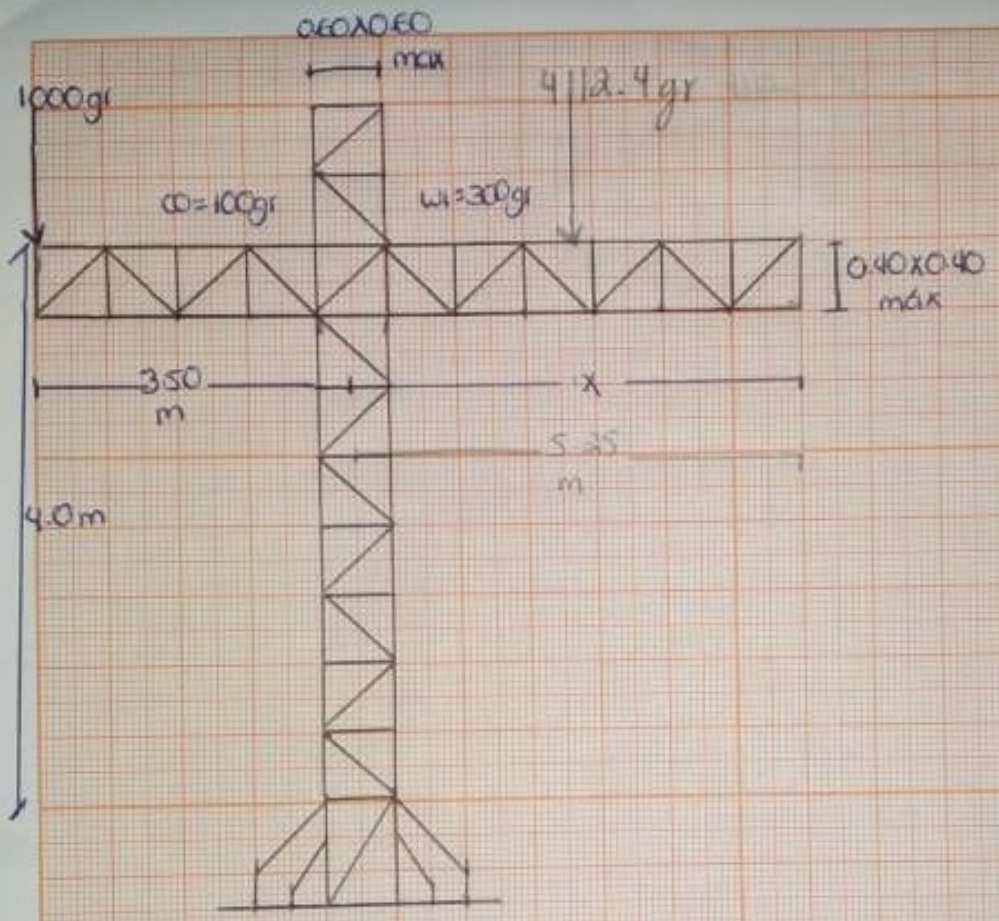
Estática para la arquitectura

Pedro Alberto García López

Arquitectura

3er Cuatrimestre

Comitán de Dominguez,28/07/23



$p = 100\ gr/m \cdot 3.50\ m = 350\ gr$

$up = \frac{3.50\ m}{2} = 1.75\ m/s$

$m_1 = 1000\ gr\ (3.50\ m/s) = 3500\ gr.m$

$m_2 = 350\ gr\ (1.75\ m/s) = 612.5\ gr\text{-}m/s$

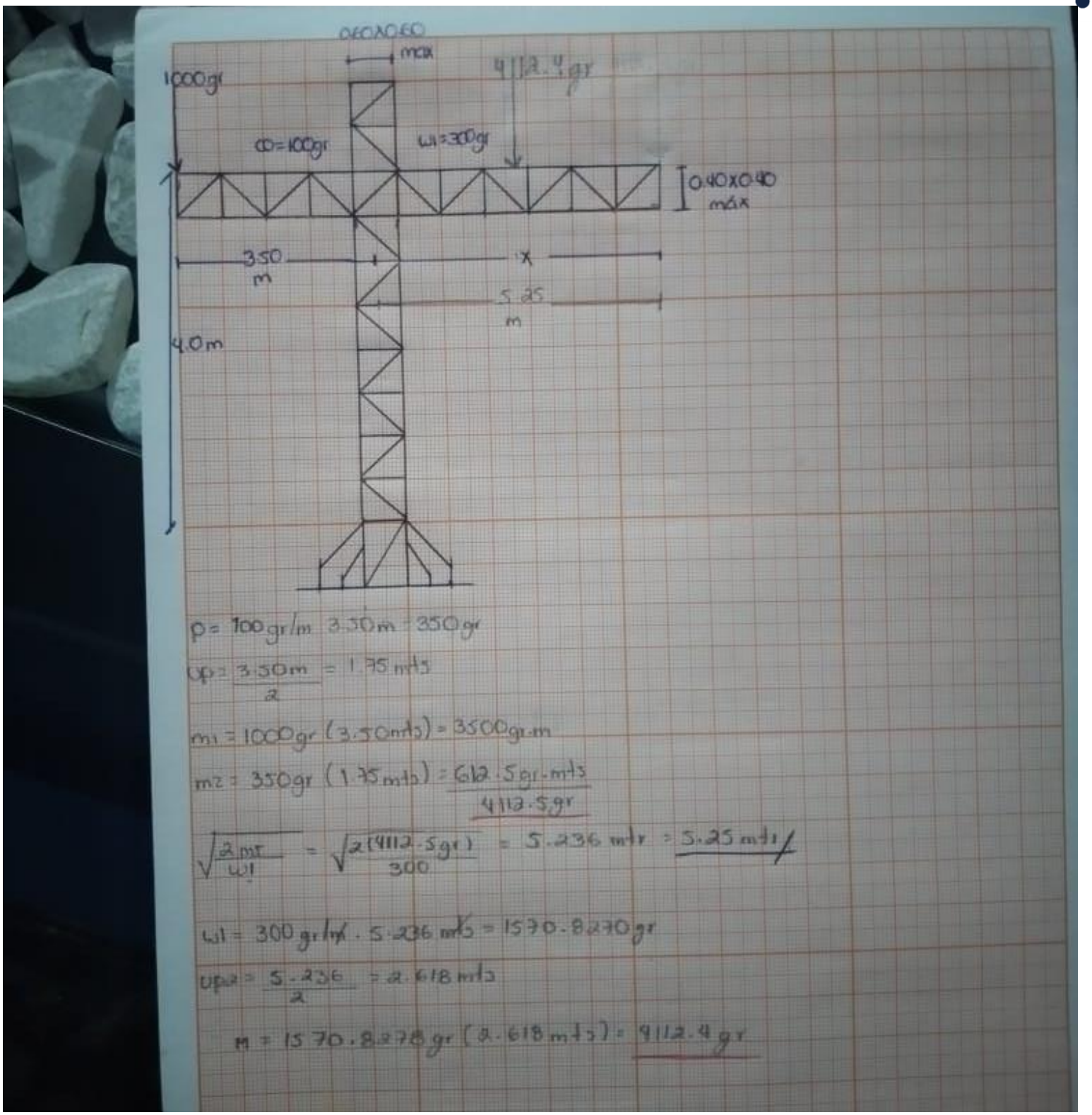
$4112.5\ gr$

$\sqrt{\frac{2\ mr}{\omega 1}} = \sqrt{\frac{2(4112.5\ gr)}{300}} = 5.236\ m/s = 5.25\ m/s$

$\omega 1 = 300\ gr/m \cdot 5.236\ m/s = 1570.8278\ gr$

$up_2 = \frac{5.236}{2} = 2.618\ m/s$

$M = 1570.8278\ gr\ (2.618\ m/s) = 4112.4\ gr$



$p = 100\,gr/m \cdot 3.50\,m = 350\,gr$

$up = \frac{3.50\,m}{2} = 1.75\,mts$

$m_1 = 1000\,gr\,(3.50\,mts) = 3500\,gr\cdot m$

$m_2 = 350\,gr\,(1.75\,mts) = 612.5\,gr\cdot mts$

$4112.5\,gr$

$\sqrt{\frac{2mr}{\omega_1}} = \sqrt{\frac{2(4112.5\,gr)}{300}} = 5.236\,mts = 5.25\,mts$

$\omega_1 = 300\,gr/m \cdot 5.236\,mts = 1570.8270\,gr$

$up_2 = \frac{5.236}{2} = 2.618\,mts$

$m = 1570.8278\,gr\,(2.618\,mts) = 4112.4\,gr$