



Nombre del alumno : Zulibeth Vázquez Noriega

Nombre del profesor: Pedro Alberto García

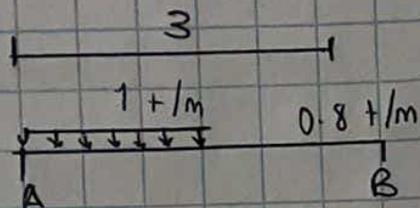
Nombre del trabajo: Evaluación III

Materia: Estática para la arquitectura.

Grado: 3er CUATRIMESTRE

Grupo:A

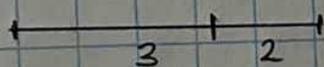
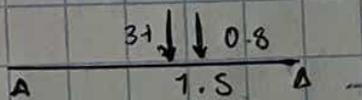
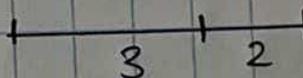
Comitan de Domínguez Chiapas a 15 de julio del 2021.



$$P = w \cdot l$$

$$P = 1 \text{ t/m} (3 \text{ m}) = 3 \text{ t}$$

$$u_p = l/2 = 3/2 = 1.5 \text{ m}$$



$$\sum F_x = 0 \rightarrow A_x + B_x = 0$$

$$\sum M_A = 0 \rightarrow -3 + (2.5 \text{ m}) - 0.8 + B_y (5 \text{ m})$$

$$-7.5 + \cdot m - 0.8 + \cdot m + B_y \cdot 5 \text{ m} = 0$$

$$-8.3 + \cdot m + B_y (5 \text{ m}) = 0$$

$$B_y = \frac{8.3 + \cdot m}{5 \text{ m}} = 1.66$$

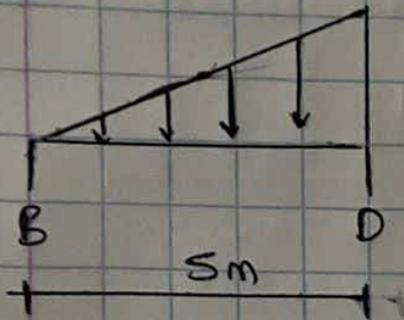
$$\sum F_y = 0 \rightarrow A_y = -3 \text{ t} - 0.8 \text{ t} + 1.66 \text{ t} = 0$$

$$A_y = 3.08 \text{ t} + 1.66 = 0$$

$$A_y = \cancel{1.18 \text{ t}} = 0 \quad A_y = 2.14$$

$$-2.14 = 0$$

$$C. 2.14 + -3 \text{ t} - 0.8 \text{ t} + 1.66 \text{ t} = 0$$

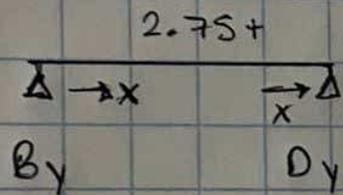


$$P(w \cdot L) / 2$$

$$P = 1.1 + /m (5m) / 2 = 2.75 +$$

$$U_p = 1/3 (L)$$

$$\frac{1}{3} \left( \frac{5}{1} \right) = \frac{5}{3} = 1.66$$



$$\sum F_x = 0 \rightarrow B_x + D_x = 0$$

$$\sum M_B = 0 \rightarrow -2.7 + (3.33m) + D_y (5m) = 0$$

$$-9.1575 + /m + D_y \cdot 5m = 0$$

$$D_y = \frac{9.1575 + /m}{5m} = 1.8315 +$$

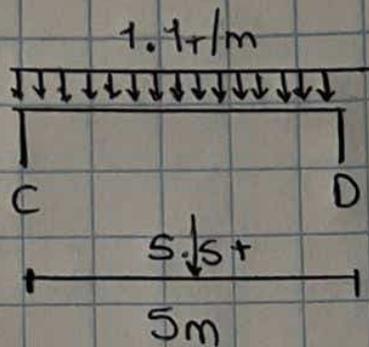
$$\sum F_y = 0 \rightarrow B_y = 2.75 + + 1.8315 + = 0$$

$$B_y = -0.9185 + = 0$$

$$B_y = 0.9185 +$$

c

$$0.9185 - 2.75 + 1.8315 = 0$$



$$P = w \cdot L$$

$$p = 1.1\text{ t/m} (5\text{m}) = 5.5\text{ t}$$

$$w_p = \frac{L}{2} = \frac{5}{2} = 2.5\text{m}$$

$$\sum F_x = 0 \rightarrow C_x + D_x = 0$$

$$\sum M_C = 0 \rightarrow -5.5 + (2.5\text{m}) + D_y(5\text{m}) = 0$$

$$-13.75\text{ t}\cdot\text{m} + D_y \cdot 5\text{m}$$

$$D_y = \frac{13.75\text{ t}\cdot\text{m}}{5\text{m}} = 2.75\text{ t}$$

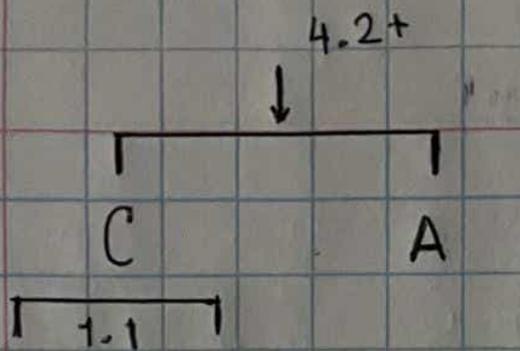
$$\sum F_y = C_y - 5.5 + 2.75 = 0$$

$$C_y - 2.75 = 0$$

$$C_y = 2.75$$

C

$$2.75 - 5.5 + 2.75 = 0$$



$$\sum F_x = 0 \rightarrow C_x + A_x = 0$$

$$\sum M_C = -4.2 + (1.1\text{m}) + A_y (5\text{m}) = 0$$

$$-4.62 + A_y \cdot 5\text{m} = 0$$

$$A_y = \frac{4.62\text{ kN}}{5\text{m}} = 0.924 \text{ kN}$$

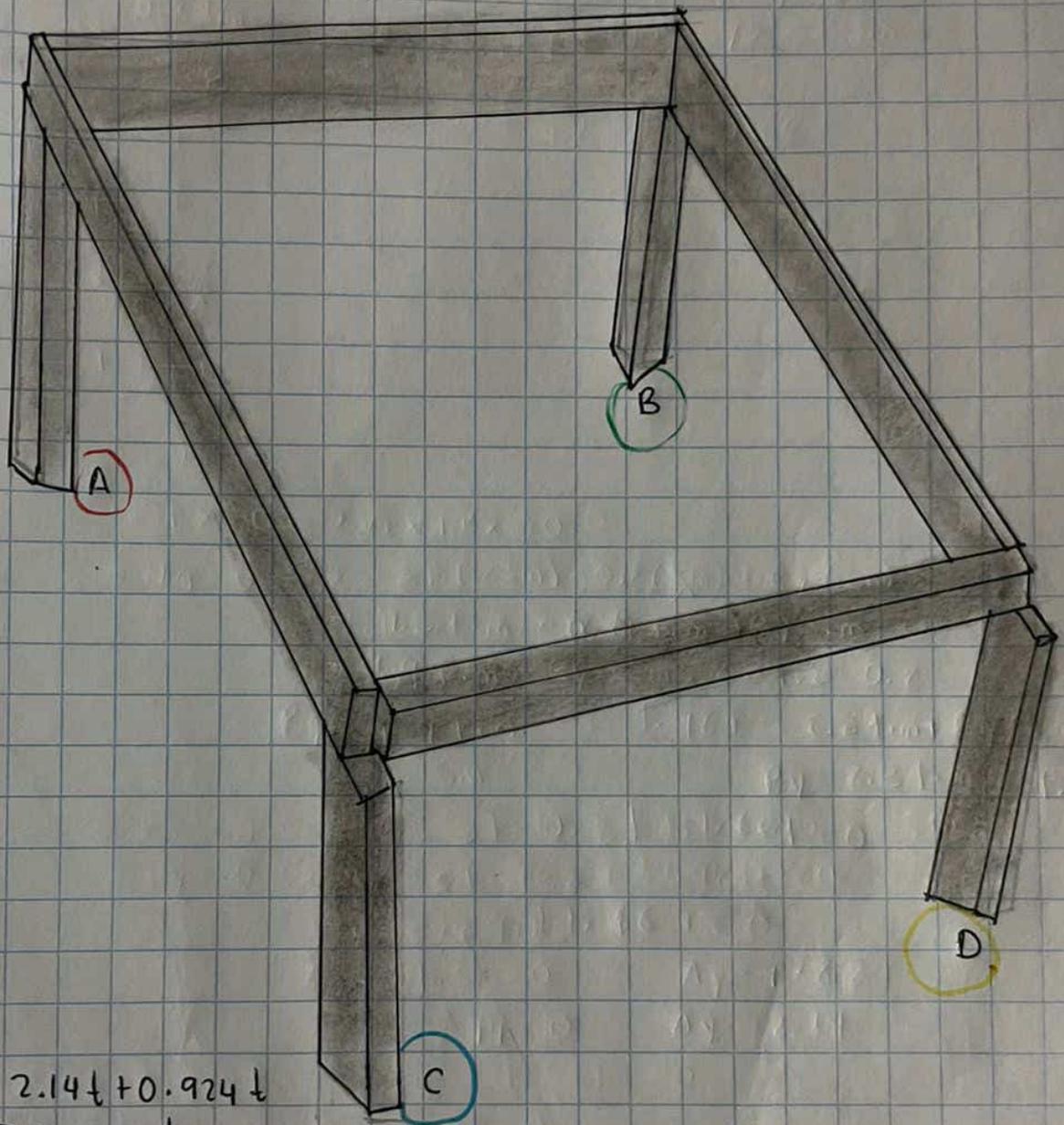
$$\sum F_y = C_y - 4.2 + 0.924 = 0$$

$$C_y - 3.276 = 0$$

$$C_y = 3.276$$

C.

$$3.276 - 4.2 + 0.924 = 0$$



$$\begin{aligned} \sum A_y &= 2.14t + 0.924t \\ &= 3.344t \end{aligned}$$

$$\begin{aligned} \sum B_y &= 1.66t + 0.9185t \\ &= 2.5785t \end{aligned}$$

$$\begin{aligned} \sum D_y &= 1.8315t + 2.75t \\ &= 4.5815t \end{aligned}$$

$$\begin{aligned} \sum C_y &= 2.75t + 3.276t \\ &= 6.026t \end{aligned}$$