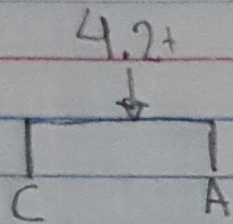




LUIS EDUARDO GUILLÉN MELGAR
UDS CAMPUS COMITÁN

3° A
ESTÁTICA PARA LA
ARQUITECTURA
PEDRO GARCÍA
EXAMEN UNIDAD 3
15/07/2021



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

$$\sum M_C = -4.2 + (1.1) + A_y (5) = 0$$

$$-4.62 + A_y - 5 = 0$$

$$A_y = \frac{4.62}{5} = 0.924$$

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

$$C_y - 3.276 = 0$$

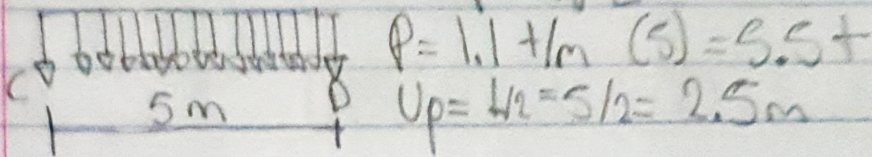
$$C_y = 3.276$$

Comprobación

$$3.276 - 4.2 + 0.924 = 0$$

$$1.1 \text{ t/m}$$

$$P = W \cdot L$$



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

$$\sum M_C = 0 \rightarrow -5.5(2.5) + D_y(5) = 0$$
$$-13.75 + D_y \cdot 5$$

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

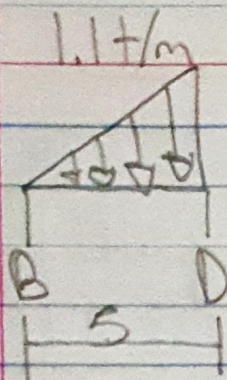
$$\sum F_y = 0 \rightarrow C_y - 5.5 + 2.75 = 0$$

$$C_y - 2.75 = 0$$

$$C_y = 2.75$$

Comprobarion

$$2.75 - 5.5 + 2.75 = 0$$



$$P = \frac{W \cdot L}{2}$$

$$P = 1.1(5)/2 = 2.75 \text{ t}$$

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

$$2.75$$

$$\uparrow D_x$$

$$\uparrow$$

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

$$B_y$$

$$D_y$$

$$\sum M_B = 0 \rightarrow D - 2.75(3.33) + D_y(5) = 0$$

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

$$D_y = \frac{9.1575}{5} = 1.8315 \text{ t}$$

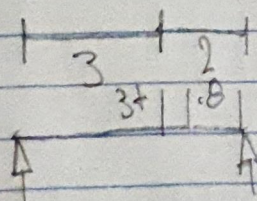
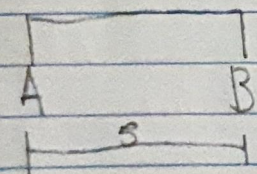
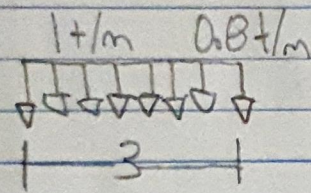
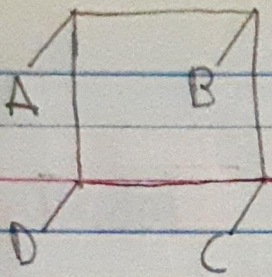
$$\sum F_y = 0 \rightarrow B_y - 2.75 + 1.8315 = 0$$

$$B_y - 0.9185 = 0$$

$$B_y = 0.9185 \text{ t}$$

Comprobación

$$0.9185 - 2.75 + 1.8315 = 0$$



$$P = W \cdot L$$

$$P = 1(3) = 3 \text{ k}$$

$$UP = L/2 = 3/2 = 1.5 \text{ m}$$

$$\sum F_x = 0 \rightarrow Ax + Bx = 0$$

$$\sum MA = 0 \rightarrow 3(1.5) - 0.8(3) + Bx(3)$$

$$-9.9 + Bx = 0$$

$$Bx = 1.98$$

$$\sum F_y = 0 \rightarrow Ay - 3 - 0.8 + 1.98 = 0$$

$$Ay = 1.82 = 0$$

$$Ay = 1.82$$

Comprobación

$$1.82 - 3 - 0.8 + 1.98 = 0$$