NOMBRE DEL ALUMNO: Gari Daniel Tinajero Altúzar

NOMBRE DEL TEMA: MOMENTOS

PARCIAL: 20

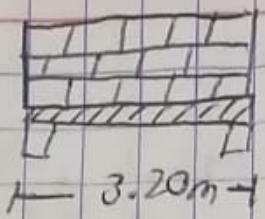
NOMBRE DE LA MATERIA: RESISTENCIA DE MATERIALES DE CONSTRUCCION

NOMBRE DEL PROFESOR: PEDRO ALBERTO GARCIA LOPEZ

LICENCIATURA: Arquitectura

CUATRIMESTRE: 4

Gabi Daniel Tinajeros Alfaro
15/10/23



concreto reforzado
muro Block = 270 kg/m

$M = \frac{1}{8} q L^2$

$b = \frac{L}{12} \rightarrow \frac{3.20}{12} = 0.266m \Rightarrow = 0.25m$

$h = 0.5 \quad (h) = 0.5(0.25m)$
$= 0.13$
$= 0.15m$

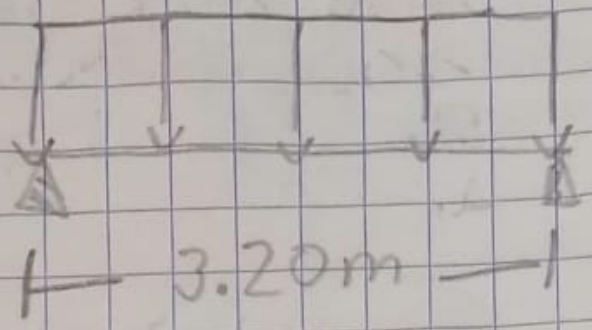
$0.25m \times 0.15m \times 2.400 kg/m^3$
$= 90 kg/m \Rightarrow$

$P_{muro} = 5.7m (270 kg/m)$
$= 1,539$
$q = 1629 kg/m \Rightarrow 1.629 ton/m$

$m = \frac{qL^2}{8} \qquad RA = RB \frac{q \cdot L}{2}$

$\theta A = \theta B = \frac{qL^3}{24EI} \qquad f = \frac{5}{384} \cdot \frac{qL^4}{EI}$

2508.7296 t/m



$M = \frac{1}{8} q L^2 \Rightarrow$

$$I_x = \frac{0.15m\,(0.25m)^3}{12} = 0.0010195312\ m^4$$

$$M = \frac{1.629\ ton/m\,(3.20m)^2}{8}$$

$$M = 2.085 \Rightarrow$$

$$R_A = R_B = \frac{1.629\ ton/m\,(3.2m)}{2} = 2.606$$

$$\theta_A \theta_B = \frac{1.629\ ton/m\,(3.2m)^3}{24\,(0.0001953m^4)\,(3,100,000\ t/m^2)}$$

$$\theta_A = \theta_B = 0.003673$$

$$F = 0.013020833$$

$$\frac{1.629\ ton/m\,(3.2m)^4}{3100000\ ton/m^2 \cdot 0.0001953m^4} = 0.00367363$$

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Concreto Reforzado = 2400 kg/m³

muro de Block = 270 kg/m

$\epsilon = 100\,000\ t/m^2$

$h = \frac{L}{12}$ $h = \frac{5.7m}{12} \rightarrow 0.475$ 0.5m

$b = (0.5)h$ $b = (0.5)0.5m \Rightarrow 0.237$

0.25m

P.P trabe = (0.5m)(0.75m)(2400 kg/m³)
= 300 kg/m

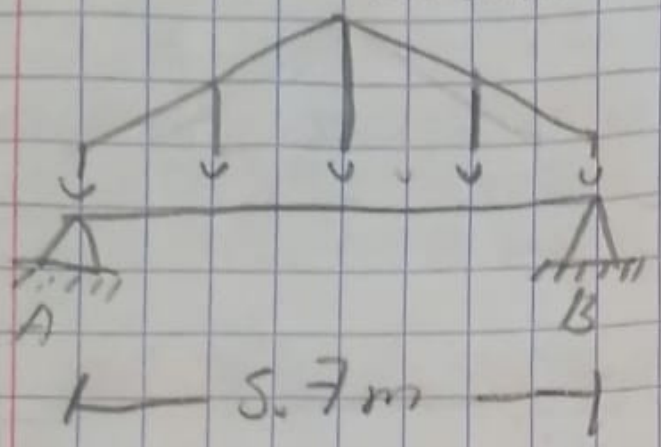
P.P muro = 3.18m (270 kg/m)
= 858.6 kg/m

La = 1.1586 ton/m

$m = \frac{9L^2}{12}$ $R_A = R_B = \frac{7L}{11}$

$\theta_A = \theta_B = \frac{5 \cdot 9 \cdot 1^3}{196 E \cdot I}$ $f = \frac{9L^4}{120EI}$

$Ix = \frac{0.25m(0.5m)^3}{12} = 0.0026041666$



$$m = \frac{1.158\ \text{ton/m}\,(5.7\text{m})^2}{12} = 3.1352\ \text{ton·m}$$

$$RA = RB = \frac{1.158\ \text{ton/m}\,(5.7\text{m})}{4} = 1.650\text{ton}$$

$$\theta_n = \theta_{13} = \frac{5\,(1.158\ \text{ton/m})(5.7\text{m})^3}{196\,(3100000)(0.002604\text{m}^4)} =$$

$$\frac{0.000677\text{m}}{3}$$

$$f = \frac{1.158\ \text{ton/m}\,(5.7\text{m})^4}{120\,(3100{,}000\ \text{t/m}^2)(0.002604\text{m}^4)} =$$

$$= 0.00126\text{m}$$