



Nombre del alumno:

Jorge Iván sosa Guillen

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Nombre del docente:

Pedro García López

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Materia:

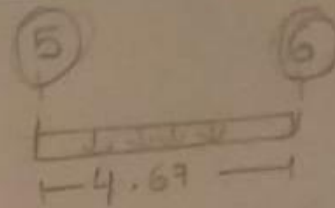
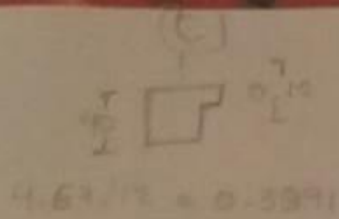
Análisis de estructuras

-

Arquitectura, quinto cuatrimestre

Febrero 12 del 2021

C - 11



$$\textcircled{1} \quad 5.4487 (0.610) = \frac{3.323707}{4.67}$$

$$= 0.711714561$$

$$M = 2.60 (0.2207/m)$$

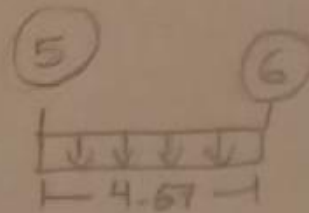
$$M = 0.702 \tau/m //$$

$$C = 0.157 \times 0.207 \times 0.240$$

$$C = 0.00727 //$$

$$\textcircled{2} \quad 10.0197 (0.610) = \frac{6.112017}{4.67}$$

$$= 1.308983084 \tau/m //$$



$$\textcircled{1} \quad 5.4487 (0.700) = \frac{3.81409}{4.67}$$

$$= 0.816721627 \tau/m //$$

C-11

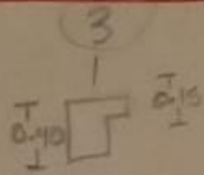
$$R = 5.048301499$$

$$\textcircled{2} \quad 10.0197 (0.700) = \frac{7.01379}{4.67}$$

$$= 1.501882127 \tau/m //$$

$$= 2.318663854 \tau/m //$$

c-12



$$4.43/12 = 0.3691$$

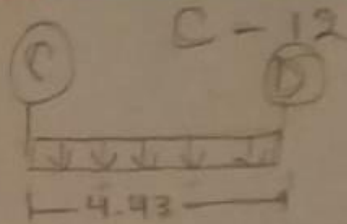
Muros

$$h = 2.60 (0.270 \tau/m)$$

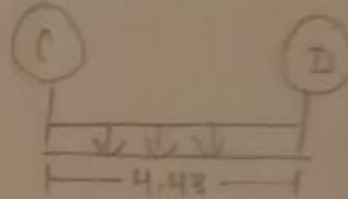
$$m = 0.702 \tau/m$$

$$c = 0.15 \times 0.20 \times 0.240$$

$$c = 0.0072 \tau/m$$



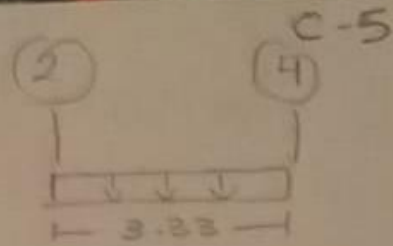
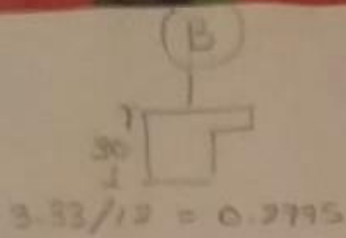
$$4.8600 (6610) = \frac{2.9646 \tau}{4.43 \text{ m}}$$
$$= 0.669209932 \tau/m //$$



$$4.8600 (0700) = \frac{3.402 \tau}{4.43 \text{ m}}$$
$$= 0.767945823 \tau/m //$$

$$\text{Total} = \boxed{2.146355756} //$$

c-5



$$\textcircled{1} 2.6277 (0.610) = \frac{1.602877}{3.33} \tau$$

$$= 0.48135045 \tau/m$$

Max

$$M = 2.62 (0.270 \tau/m)$$

$$M = 0.708 \tau/m$$

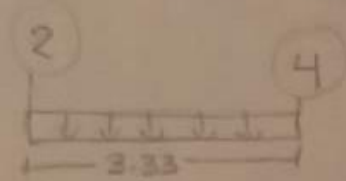
$$C = 0.15 \times 0.30 \times 0.240$$

$$C = 0.0072 \tau$$

$$\textcircled{2} 2.3286 (0.610) = \frac{1.420446}{3.33}$$

$$= 0.42656036 \tau/m$$

$$Pr \tau = 0.90791081 \tau/m$$



$$\textcircled{1} 2.6277 (0.700) = \frac{1.83939}{3.33} \tau$$

$$= 0.552369869 \tau/m$$

$$R = 2.658975675 \tau/m$$

$$\textcircled{2} 2.3286 (0.700) = \frac{1.63002}{3.33} \tau$$

$$= 0.489495495 \tau/m$$

$$\text{Total } Pr \tau = 1.041864865 \tau/m$$

C-1

The image shows handwritten engineering calculations and diagrams on a piece of paper. At the top left, there is a diagram of a T-shaped cross-section with a top flange width of 0.30 and a web width of 0.15. Below it, the text reads $1.70 R = 0.15$. To the right, there is a diagram of a beam of length 1.90 m, supported at two points labeled 1 and 2. A distributed load is shown on the beam. Below this diagram, the calculation is: $0.9025 (0.610) = \frac{0.550525 T}{1.90 m}$, which simplifies to $= 0.28975 T/m$. A second diagram of the same beam is shown below, with a different distributed load. The calculation for this load is: $0.9025 (0.300) = \frac{0.27075 T}{1.90 m}$, which simplifies to $= 0.1425 T/m$. At the bottom, a box contains the final result: $Total = 1.33145 T/m$. On the left side, there are additional calculations: $M = 2.20 - (0.20 T/m)$, $M = 0.202 T/m$, $C = 0.15 \times 0.30 \times 0.340$, and $C = 0.0093 T/m$. A circled 'C1' is also present on the left side.

0.30
0.15
 $1.70 R = 0.15$

M = 2.20 - (0.20 T/m)
 $M = 0.202 T/m$

$C = 0.15 \times 0.30 \times 0.340$
 $C = 0.0093 T/m$

C1

1 2
1.90

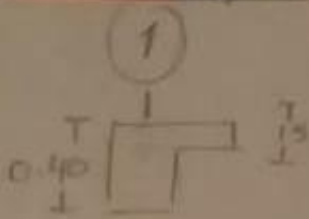
$0.9025 (0.610) = \frac{0.550525 T}{1.90 m}$
 $= 0.28975 T/m$

1 2
1.90

$0.9025 (0.300) = \frac{0.27075 T}{1.90 m}$
 $= 0.1425 T/m$

Total = 1.33145 T/m

C-2



$$4.57 / 12 = 0.3808$$

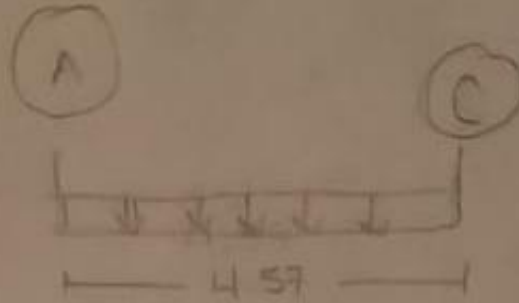
$$M = 2.60 \text{ (0.230 T/m)}$$

$$M = \underline{0.702 \text{ T/m}}$$

$$C = 0.15 \times 6.20 \times 0.240$$

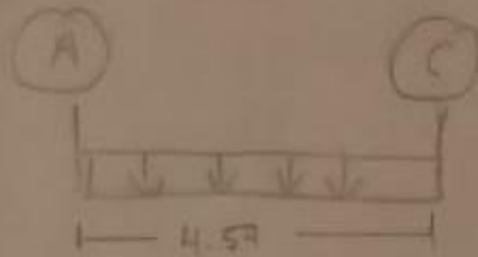
$$C = \underline{0.0022 \text{ T/m}}$$

C-2



$$3.4390 \text{ (0.610)} = \frac{2.09779}{4.57}$$

$$= \underline{0.45903501 \text{ T/m}}$$



$$3.4390 \text{ (0.700 T)} = \frac{2.4073}{4.57}$$

$$= \underline{0.526761488 \text{ T/m}}$$

$$\text{Total} = \underline{1.694996498 \text{ T/m}}$$

