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**Nombre del trabajo:** Trabes

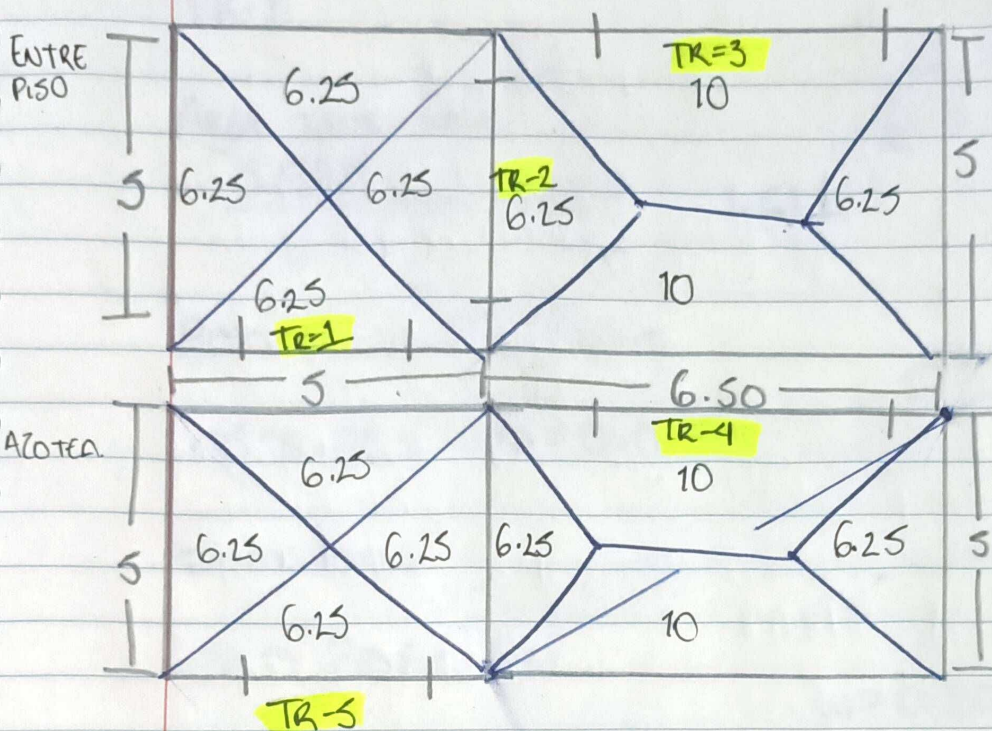
**Materia:** Análisis de estructuras

**Grado:** 5to Cuatrimestre

**Grupo:** LAR04EMC0120-A

Comitán de Domínguez Chiapas a 2 de febrero del 2022

## ANALISIS DE ESTRUCTURAS...



PERALTE

$$\frac{20}{170} + 0.0254 = 0.143$$

$$\frac{23}{170} + 0.0254 = 0.160$$

> 25 CASETON /

PESO DE AREA TRIBUTARIA.

ENTRE PISO

$$6.25 \text{ m}^2 \times 635 \text{ kg/m}^2 = 3.968 \text{ t/m}$$

$$10 \text{ m}^2 \times 635 \text{ kg/m}^2 = 6.350 \text{ t/m}$$

AZOTEA.

$$6.25 \text{ m}^2 \times 665 \text{ kg/m}^2 = 4.156 \text{ t/m}$$

$$10 \text{ m}^2 \times 665 \text{ kg/m}^2 = 6.65 \text{ t/m}$$

TR-1

AREA TRIBUTARIA.

$$\frac{3.968}{5} = 0.7936$$

PESO propio de trabe.

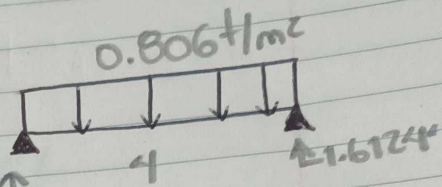
$$.15 \times .33 \times .240 = 0.0126m$$

Sumatoria.

$$r = 0.8062 \text{ t/m}$$

$$w = 0.8062 \text{ t/m}$$
$$R_A = R_B = w(L)/2$$

$$\frac{0.8062 (4)}{2} = \underline{1.6124}$$



Tr-2

AREA TRIBUTARIA.

$$\frac{3.9687}{5} = 0.7937 \times 2 = \underline{1.5874}$$

PESO PROPIO DE TRABE

$$.15 \times .40 \times .240 = 0.0144 \text{ m}^3$$

PESO DE MURO

$$2.55 \times .270 = 0.6885$$

PESO PROPIO DE CADENA DE CERRAMIENTO.

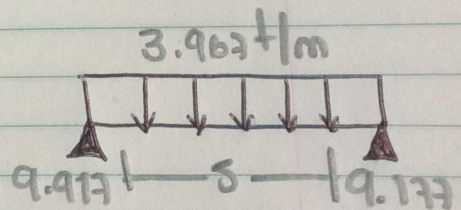
$$0.15 \times 0.40 \times .240 = 0.0144$$

AREA TRIBUTARIA DE AZOTEA

$$\frac{4.1562}{5} = 0.8312 (2) = 1.6624$$

$$\text{TOTAL} = 3.9671 \text{ /m}^2$$

$$R_A = R_B = \frac{3.9671 (5)}{2} = \underline{9.91775}$$



TR-3

AREA TRIBUTARIA

$$\frac{6.35}{6.50} = 0.9769$$

PESO PROPIO DE TRABE

$$0.15 \times 0.55 \times 240 = 0.0198$$

PESO PROPIO DE MURO.

$$2.70 \times 270 = 0.729$$

PESO PROPIO DE CADENA DE CERRAMIENTO.

$$.15 \times .25 \times 240 = 0.009$$

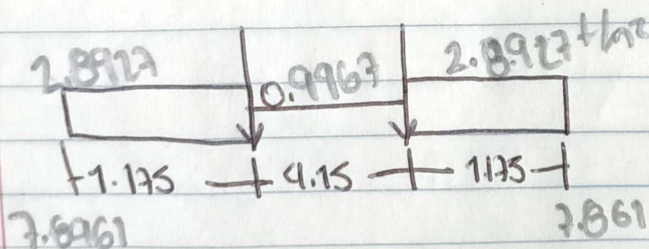
AREA TRIBUTARIA DE AZOTEA.

$$\frac{6.65}{6.50} = 1.0230$$

PRETIL.

$$0.50 \times 270 = 0.135$$

TOTAL. 2.8927 t/m<sup>2</sup>



TR-4

PESO PROPIO DE LA TRABE

$$.15 \times 0.35 \times 240 = 0.0126$$

PESO PROPIO DE MURO (DRETL)

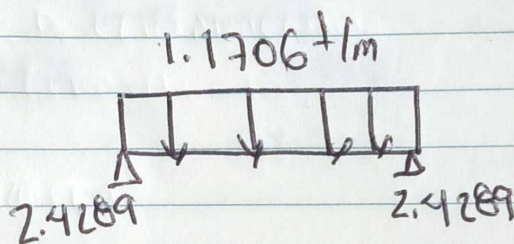
$$.50 \times .270 = 0.135$$

AREA TRIBUTARIA DE AZOTEA.

$$\frac{6.65}{6.50} = 1.0230$$

SUMATORIA.

$$1.1706$$



$$TR=5$$

PESO PROPIO DE TRABE

$$0.15 \times 3.5 \times 230 = 0.0126$$

PESO PROPIO DE MURO

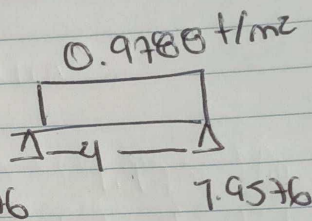
$$0.50 \times 230 = 0.135$$

ARE TRIBUTARIA DE AZOTEA

$$\frac{4.1562}{5} = 0.8312$$

TOTAL =

$$0.978 \text{ t/m}^2$$



$$1.9576$$

$$1.9576$$