

Ejercicio 1

32m de Eslona

Desplazamiento = 352 T sin carga,  $\Delta$  con carga = 352 T + 864 T = 1216 T

| Nº1   | Nº2   | Nº3   | Nº4   |               |
|-------|-------|-------|-------|---------------|
| 192 T | 224 T | 272 T | 176 T | = 864 T total |
| 6m    | 6m    | 6m    | 6m    |               |

$$\frac{\Delta}{\text{Eslona}} = \frac{352 \text{ T}}{32 \text{ m}} = 11 \frac{\text{T}}{\text{m}} \quad \left| \quad \frac{\Delta + \text{carga}}{\text{Eslona}} = \frac{1216 \text{ T}}{32 \text{ m}} = 38 \frac{\text{T}}{\text{m}}$$

Nº1



$$\frac{192 \text{ T}}{6 \text{ m}} = 24 \frac{\text{T}}{\text{m}} + 11 \frac{\text{T}}{\text{m}} = 35 \frac{\text{T}}{\text{m}} \quad \textcircled{1}$$

Nº2



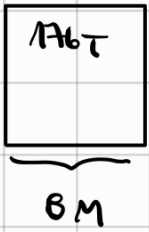
$$\frac{224 \text{ T}}{6 \text{ m}} = 26 \frac{\text{T}}{\text{m}} + 11 \frac{\text{T}}{\text{m}} = 37 \frac{\text{T}}{\text{m}} \quad \textcircled{2}$$

Nº3



$$\frac{272 \text{ T}}{6 \text{ m}} = 34 \frac{\text{T}}{\text{m}} + 11 \frac{\text{T}}{\text{m}} = 45 \frac{\text{T}}{\text{m}} \quad \textcircled{3}$$

Nº4



$$\frac{176T}{8m} = 22 \frac{T}{m} + 11 \frac{T}{m} = 33 \frac{T}{m} \quad (4)$$

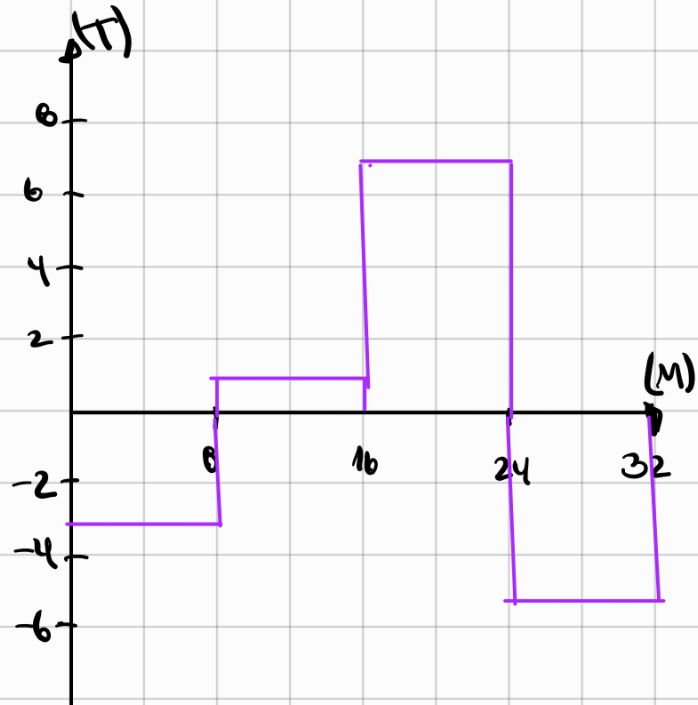
\* CON AREA POSITIVA

$$[0-8] = 35 - 38 = -3 \frac{T}{m}$$

$$[8-16] = 39 - 38 = 1 \frac{T}{m}$$

$$[16-24] = 45 - 38 = 7 \frac{T}{m}$$

$$[24-32] = 33 - 38 = -5 \frac{T}{m}$$

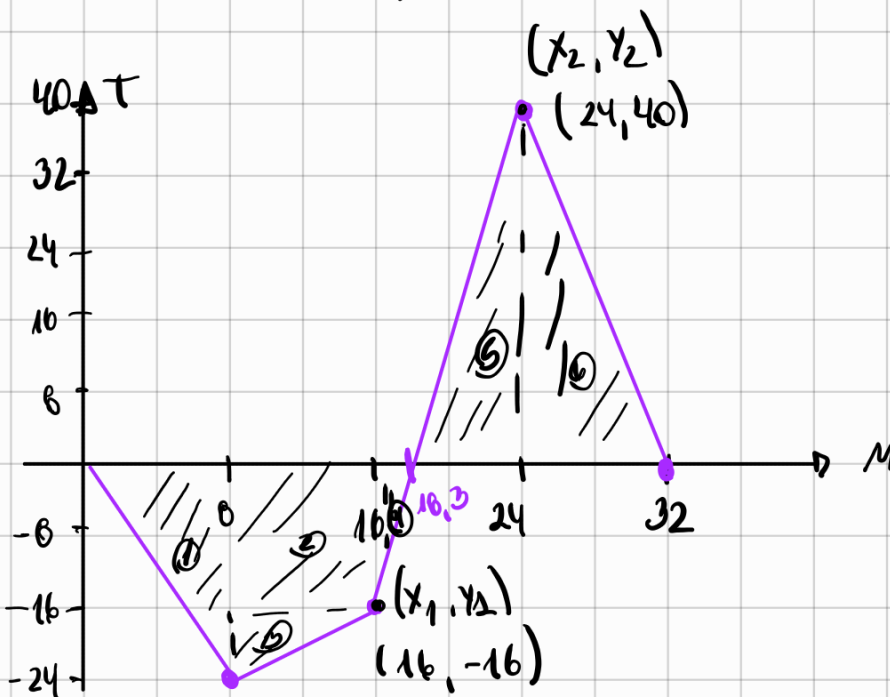


$$[0-8] = 8m \cdot -3 \frac{T}{m} = -24 T$$

$$[8-16] = 8m \cdot 1 \frac{T}{m} = 8T - 24T = -16 T$$

$$[16-24] = 8m \cdot 7 \frac{T}{m} = 56T - 16T = 40 T$$

$$[24-32] = 8m \cdot -5 \frac{T}{m} = -40T + 10T = 0 T$$



$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{40 - (-16)}{24 - 16} = \frac{56}{8} = 7$$

$$y = mx + b$$

$$120 = mx + b$$

$$128 = 7x + b$$

$$\frac{128}{7} = b$$

$$18,3 T \cdot m = b$$

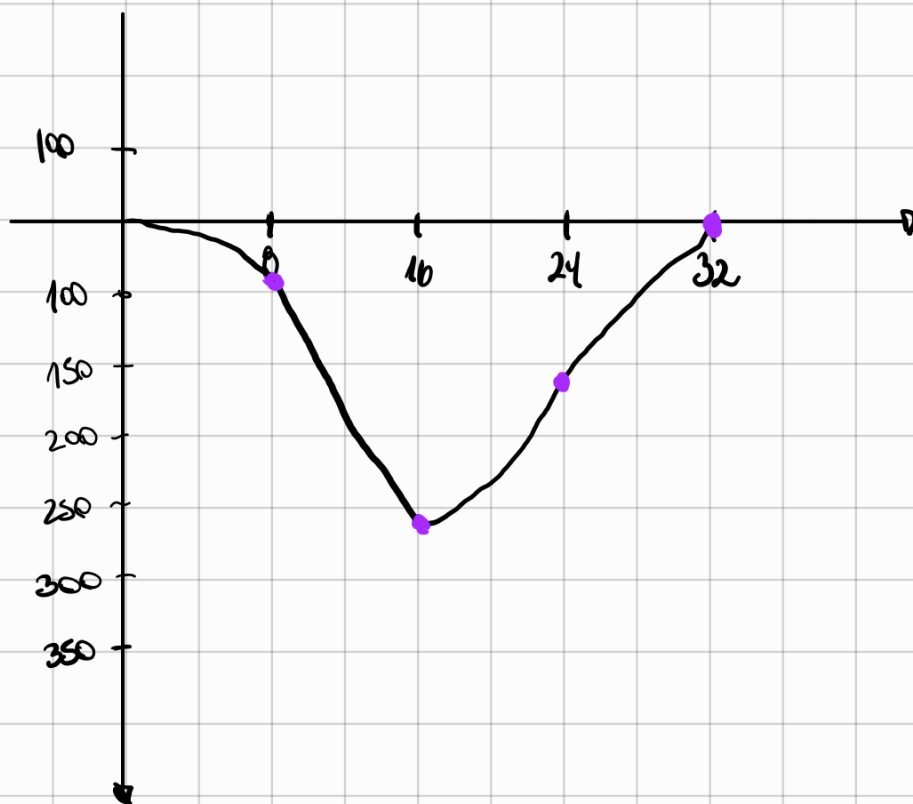
Diagonales  
Forma corte

$$① \quad [0-8] = \left( \frac{0 \cdot -24}{2} \right) = -96 \text{ TM}$$

$$②-③ \quad [8-16] = (8 \cdot -16) + \left( \frac{0 \cdot -8}{2} \right) = -128 + -32 = -160 - 96 = -256 \text{ TM}$$

$$④-⑤ \quad [16-24] = \left( \frac{2,3 \cdot -16}{2} \right) + \left( \frac{5,7 \cdot 40}{2} \right) = -18,4 + 114 = 95,6 - 256 = -160,4 \text{ TM}$$

$$⑥ \quad [24-32] = \left( \frac{8 \cdot 40}{2} \right) = 160 - 160,4 = 0,4 \approx 0 \text{ TM}$$



[ La Góndola está en riesgo y su momento flector mínimo se encuentra en la 2da trampa ]