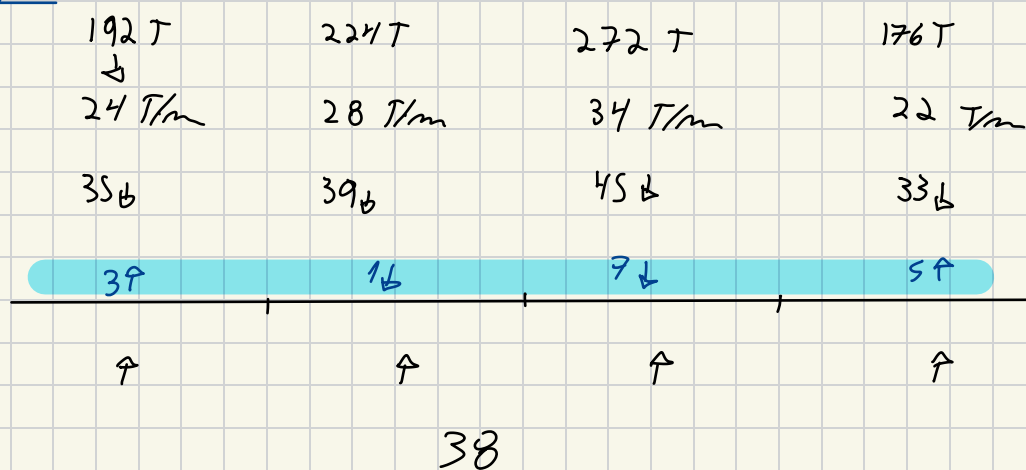


## Pregunta 1



Boyantes :  $\frac{192 + 224 + 272 + 176}{32} = \frac{864}{32} + 352$   
 $= \frac{1216}{32}$   
 $= 38 \text{ T/m}$

$P = \frac{352}{32} = 11 \text{ T/m} \rightarrow \text{por metro}$

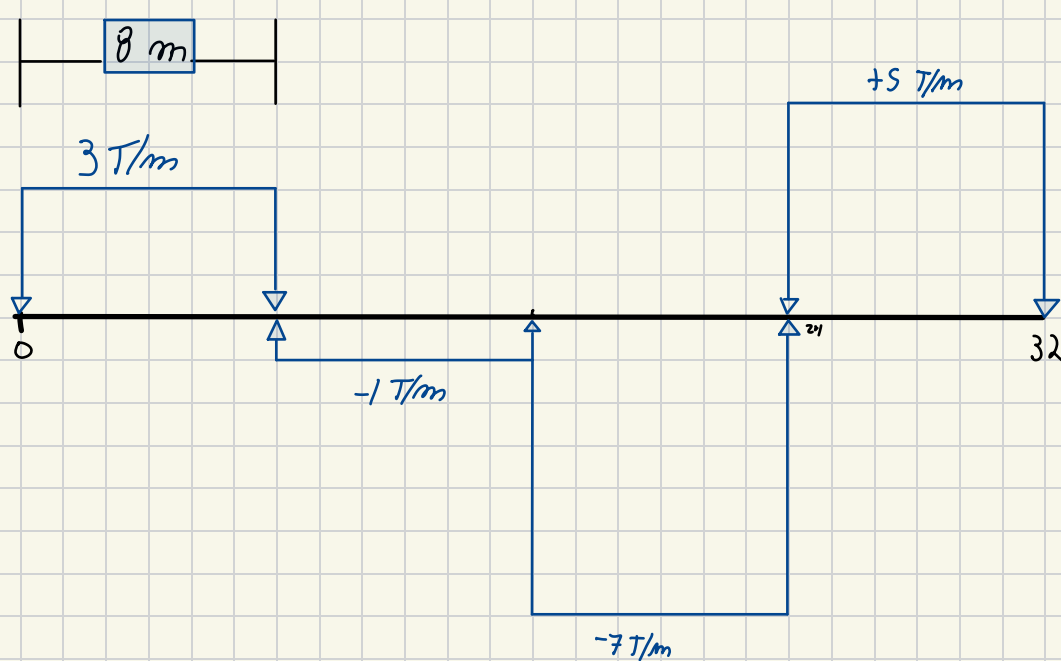
Carga por bodega:  $192/8 = 24 \text{ T/m} + 11 = 35$

$224/8 = 28 \text{ T/m} + 11 = 39$

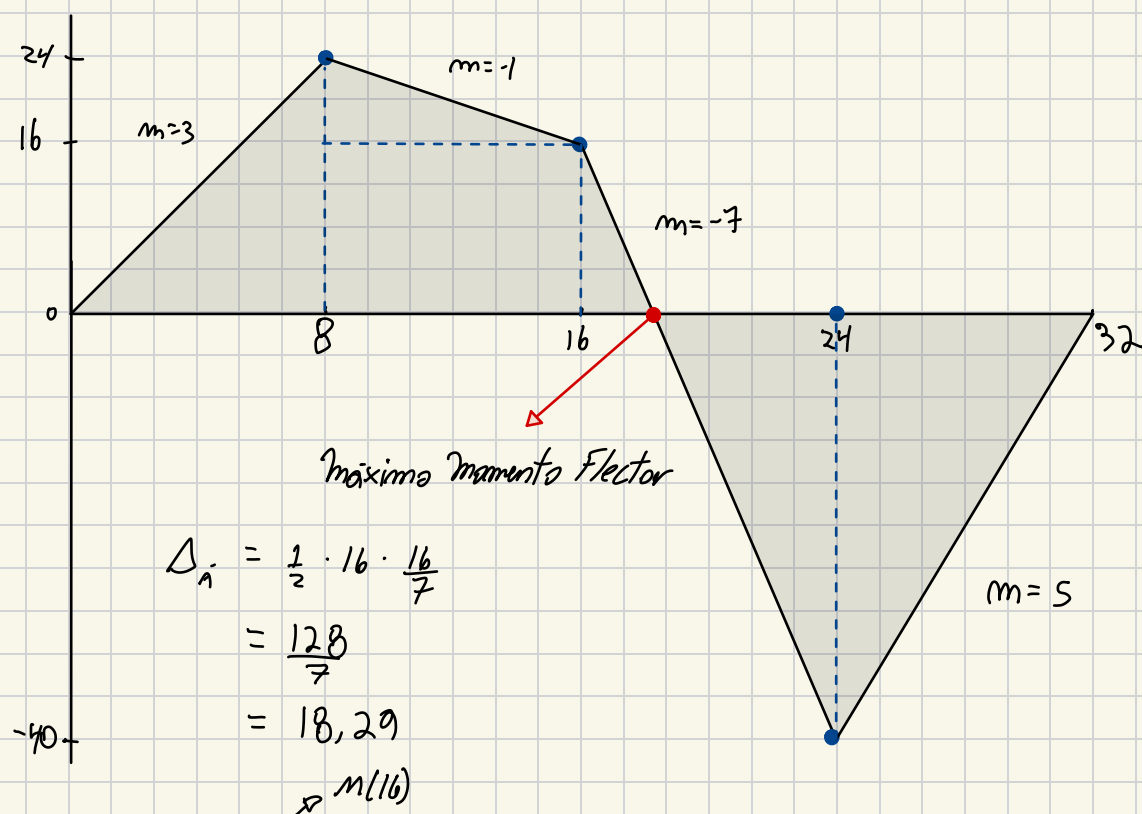
$272/8 = 34 \text{ T/m} + 11 = 45$

$176/8 = 22 \text{ T/m} + 11 = 33$

## Diagrama de Carga



## Diagrama de Corte



$\Delta_1 = \frac{1}{2} \cdot 16 \cdot \frac{16}{7}$   
 $= \frac{128}{7}$   
 $= 18,29$   
 $\rightarrow m(16)$

$M_{m\acute{o}x} = 256 + 18,29 \approx 274,3 \text{ T}\cdot\text{m}$

$\Delta V = m \cdot \Delta x$

$0-8 \rightarrow +3 \cdot 8 = 24 - 0 = 24 \uparrow$

$8-16 \rightarrow -1 \cdot 8 = -8 = 24 - 32 = 16 \downarrow$

$16-24 \rightarrow -7 \cdot 8 = -56 = 16 - 72 = -40 \downarrow$

$24-32 \rightarrow 5 \cdot 8 = 40 = 40 - 40 = 0$

## Calcula Momento Flector

| Tramos |                                                                                   |
|--------|-----------------------------------------------------------------------------------|
| 0-8    | $\frac{0+24}{2} = 12T \cdot 8m = 96T \cdot m$                                     |
| 8-16   | $\frac{24+16}{2} = 20T \cdot 8m = 160T \cdot m + 96T \cdot m = 256T \cdot m$      |
| 16-24  | $\frac{16+(-40)}{2} = -12T \cdot 8m = -96T \cdot m + 256T \cdot m = 160T \cdot m$ |
| 24-32  | $\frac{-40+0}{2} = -20T \cdot 8m = -160T \cdot m + 160T \cdot m = 0T \cdot m$     |

## Diagrama de Momento Flector

