

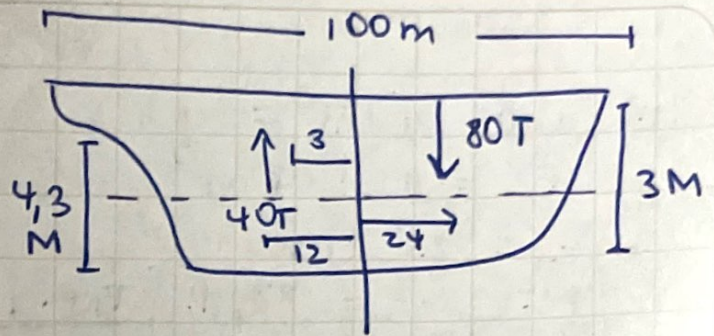
5.- eslora : 100 m $\rightarrow$ L

calado proa : 3 m

" popa : 4,3 m

TPC 10 TON

MTC_{1 cm} = 120 Tn-m



LCF = 3 m a popa de la línea cría

se cargan 80T y luego se descargan 40T, por ende se cargan 40T.

$$\Delta T = \frac{\text{carga}}{\text{TPC}} = \frac{40 \text{ TON}}{10 \text{ TON}} = +4 \text{ cm}$$

calado proa:

$$\text{MTO}_1 = 80 \text{ T} \times 24 \text{ m} = 1920 \text{ TM}$$

$$1920 \text{ TM} = 120 \left(\frac{\text{TON} \cdot \text{M}}{\text{cm}} \right) = -16 \text{ cm} \rightarrow \Delta \text{TPR}$$

$$\text{calado popa: } \Delta \text{TPP} = \frac{40 \text{ T} - 12 \text{ m}}{120 \text{ T-m}} = -4 \text{ cm}$$

$$\begin{aligned} \text{calado proa: } T_{pr2} &= T_{pr} + \Delta T - \Delta \text{TPR} \\ &= 3 + 0.04 \text{ m} - 0,16 \text{ m} \end{aligned}$$

$$\boxed{T_{pr2} = 2,88 \text{ m}}$$

$$\begin{aligned} \text{calado popa: } T_{pp2} &= T_{pp} + \Delta T - \Delta \text{TPP} \\ &= 4,3 + 0,04 \text{ m} - 0,04 \text{ m} \end{aligned}$$

$$\boxed{T_{pp2} = 4,3 \text{ m}}$$