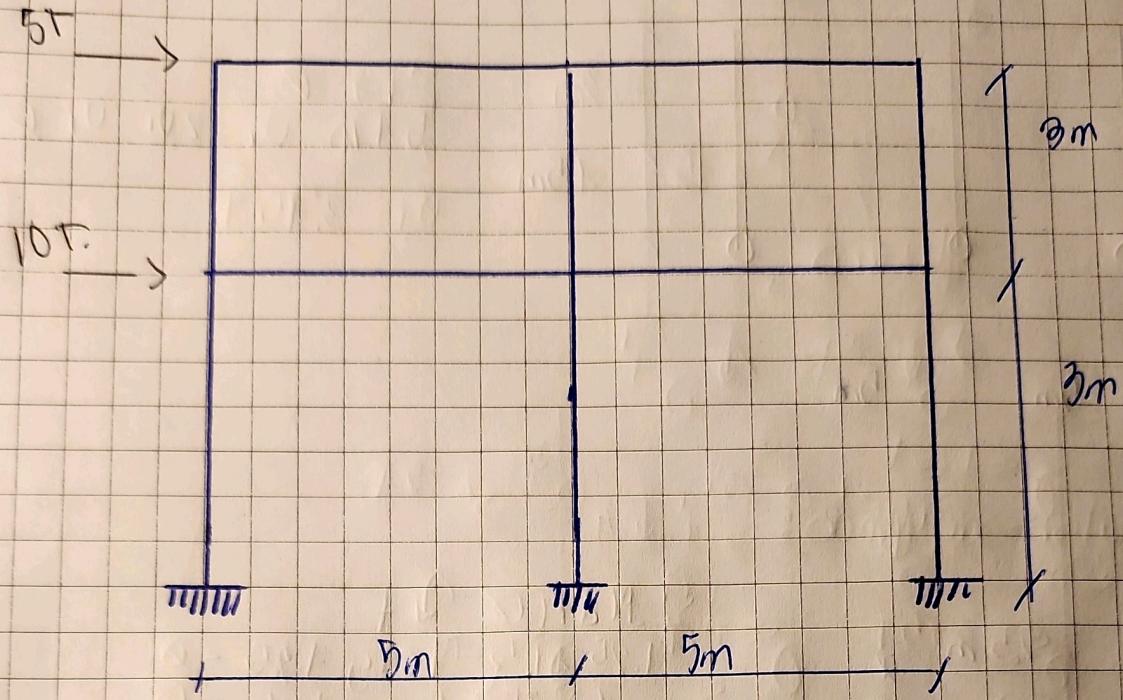
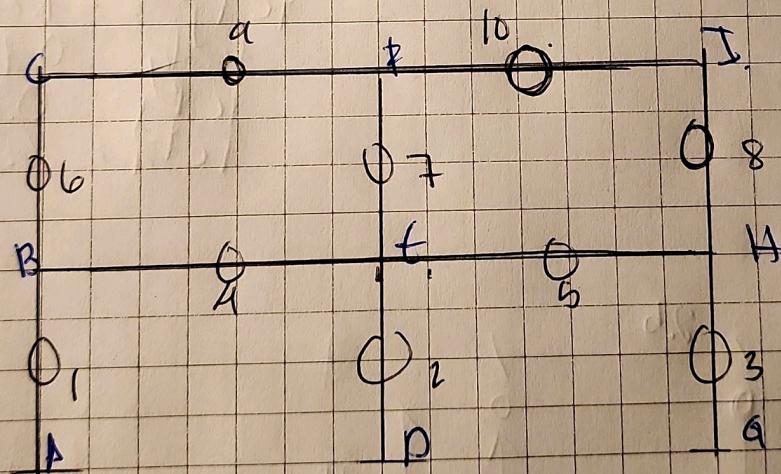


Marlon Iván Correto Rivera 901230088.

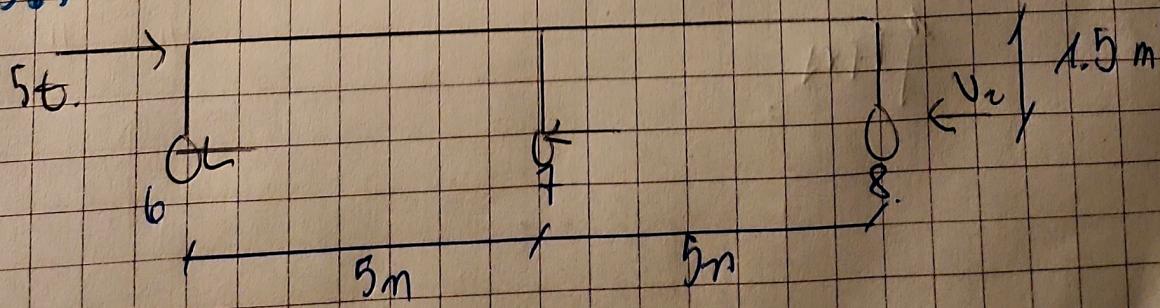
Lab. Análisis Estructural I.



1.) Puntos de Inflexión:

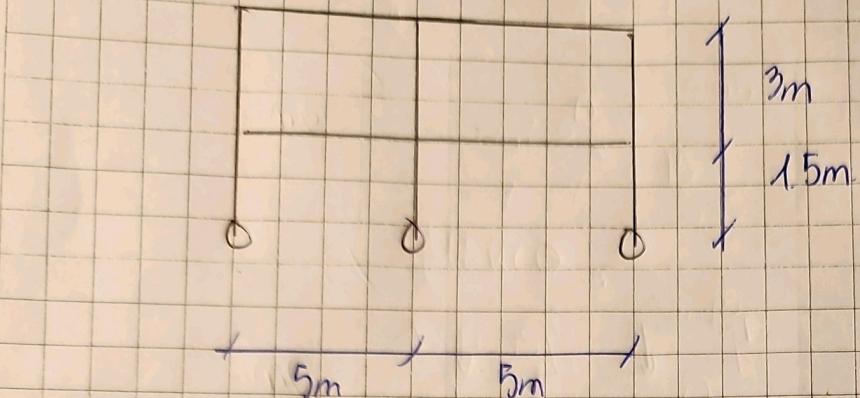


2.) Reacciones LATERALES:



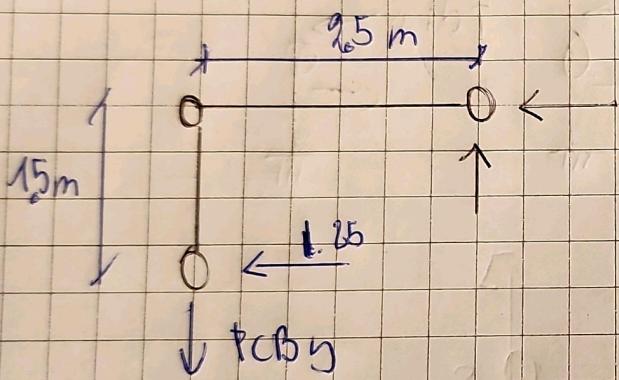
$$\sum \Delta x = 0 \rightarrow 1$$

$$5 - U_3 - 2U_2 - U_1 = 0 \Rightarrow U_3 = 1.25 T.$$

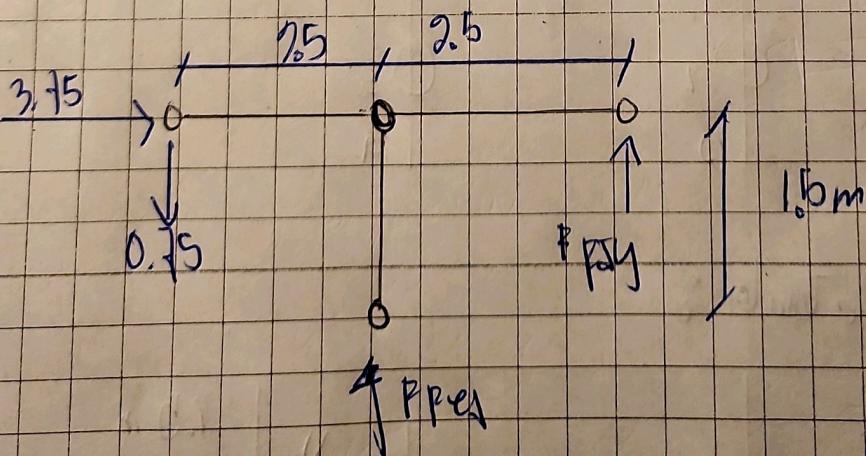


$$\begin{aligned} \sum \dot{x} &= 0 \\ 5 - 10 - U_1 - 2U_2 - U_3 &= 0 \\ U_1 &= 3.75 T. \end{aligned}$$

### 3.) Análisis de Nodos:



$$\begin{aligned} \sum M_C &= 0 \quad \text{about } f \\ 1.25 \times 1.5 - P_{CBG}y + 0.5 &= 0 \\ 1.875 - P_{CBG}y + 0.5 &= 0 \\ 1.875 - P_{CBG}y &= 0 \\ -P_{CBG}y &= -1.875 \\ P_{CBG} &= 1.875 / 2.5 \\ P_{CBG} &= 0.75 T \\ P_{CBG} &= 0.75 \\ P_{CBG} &= 3.75 T. \end{aligned}$$

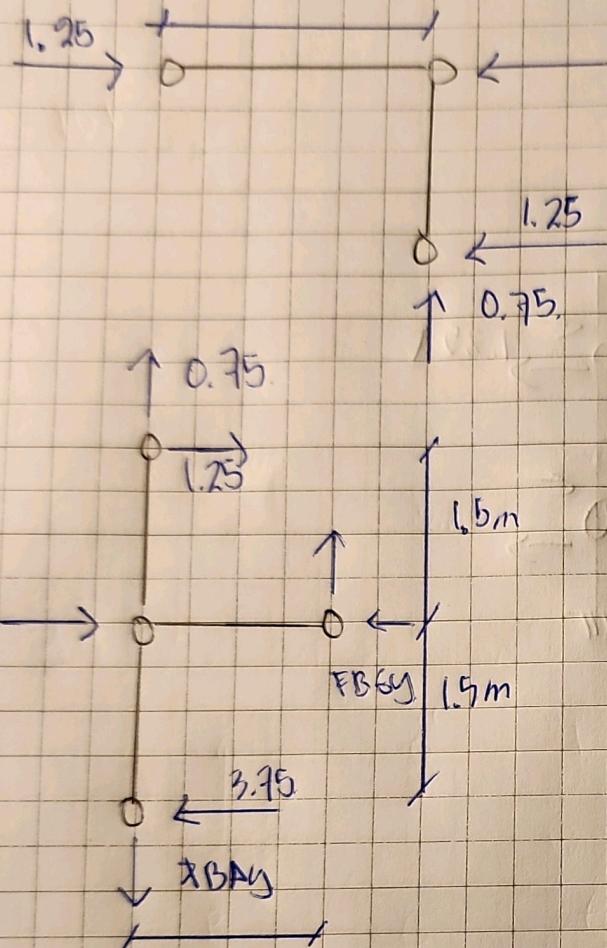


$$SMP = 0 \quad \text{+}$$

$$1.5 \times 2.5 - 0.5 + 0.25 - P_{B6y} \times 2.5 = 0 \\ 3.75 - 1.875 - 1 + 0.25 = 0 \\ 1.875 - P_{B6y} \times 2.5 = 0$$

$$P_{B6y} = 0 \quad \leftarrow \\ P_EA = 1.25 \quad \leftarrow$$

$$P_{B6y} = 0.75 \uparrow$$



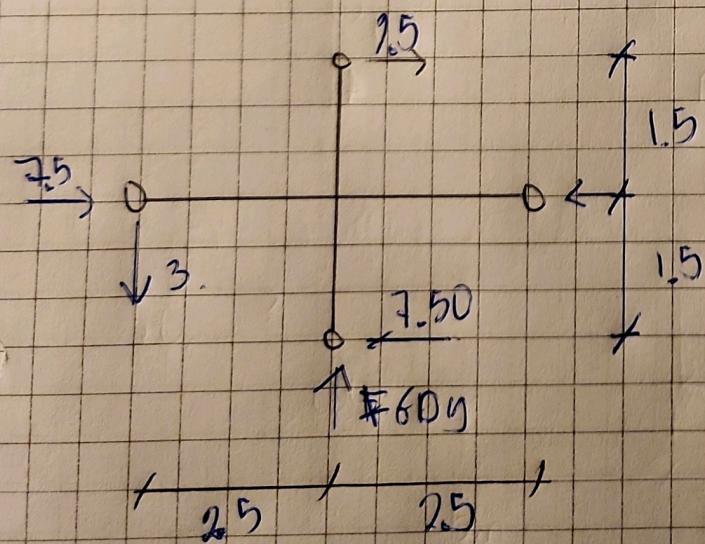
$$SMP = 0 \quad \text{+}$$

$$1.5 \times 1.25 + 2.5 \times P_{B6y} + 3.75 \times 1.5 = 0 \\ 1.875 + 2.5 \times P_{B6y} + 5.625 = 0 \\ 1.875 + P_{B6y} \times 2.5 + 5.625 = 0 \\ P_{B6y} \times 2.5 = -7.5 \\ P_{B6y} = -7.5 / 2.5$$

$$P_{B6y} = 3 \uparrow$$

$$P_{B6y} = 0$$

$$\times B6T = 7.5 \leftarrow$$



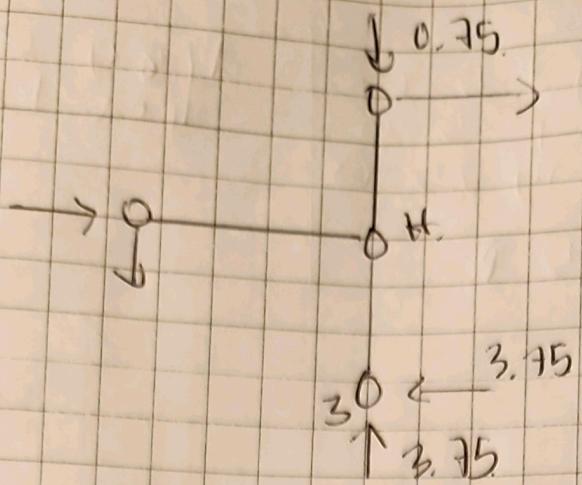
$$SMP = 0 \quad \text{+}$$

$$1.25 + 2.5 - 2.5 + 3 + 1.5 \times 1.5 = 7.5 \rightarrow \\ 7.5 = 0$$

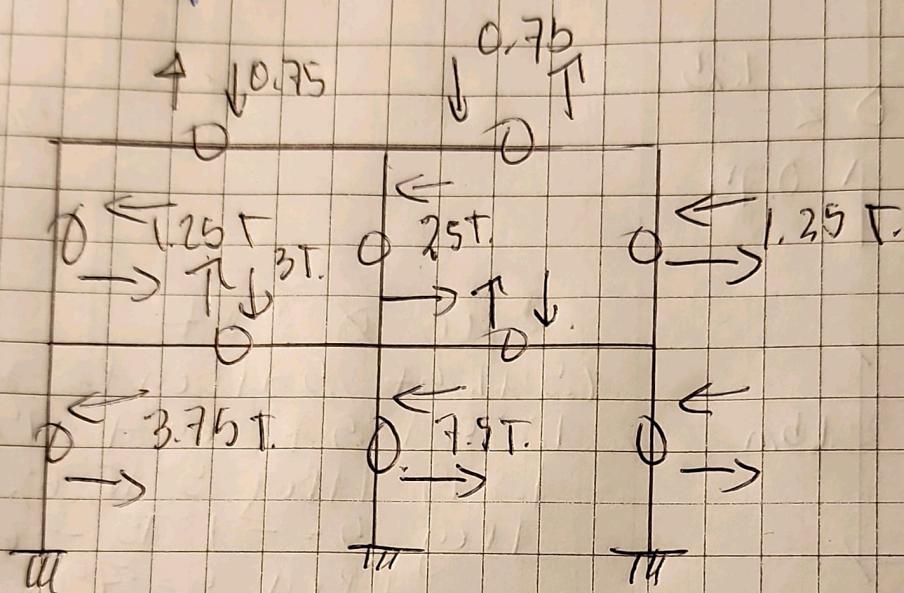
$$P_{B6y} = 3 + 1$$

$$P_{E6y} = 0$$

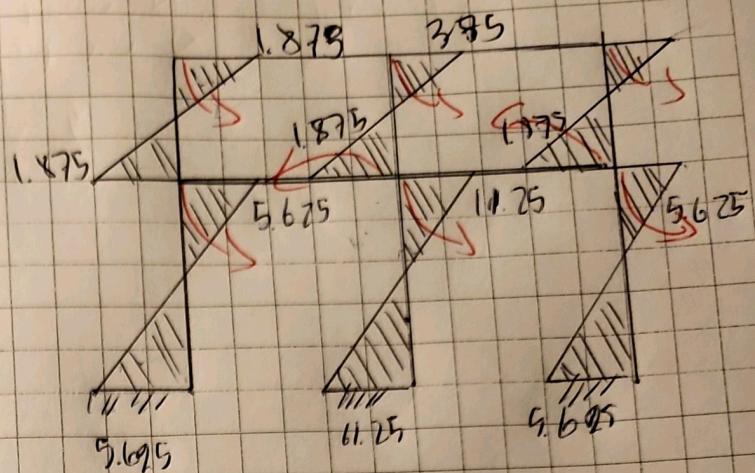
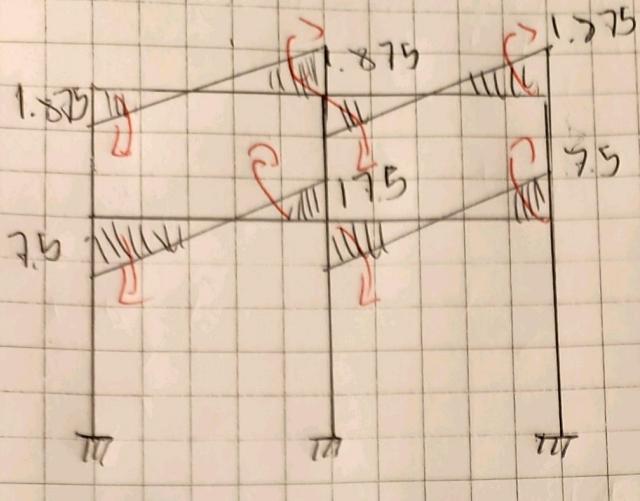
$$P_{CHT} = 7.5 \leftarrow$$



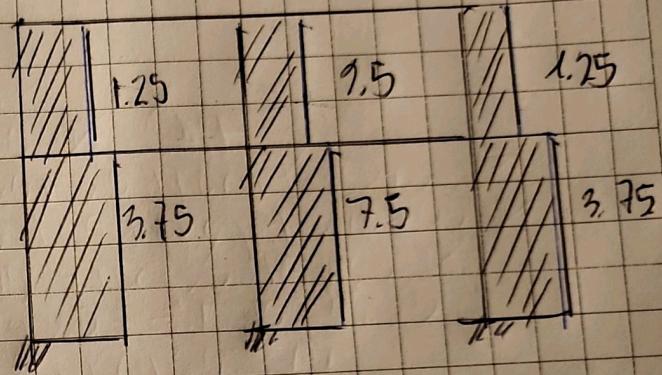
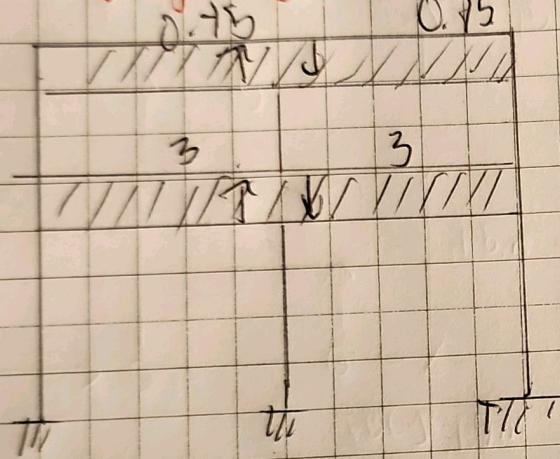
MARCO.



→ Diagramm Momento.



→ Diagramm der Cofte



→ Diagram Axiale

