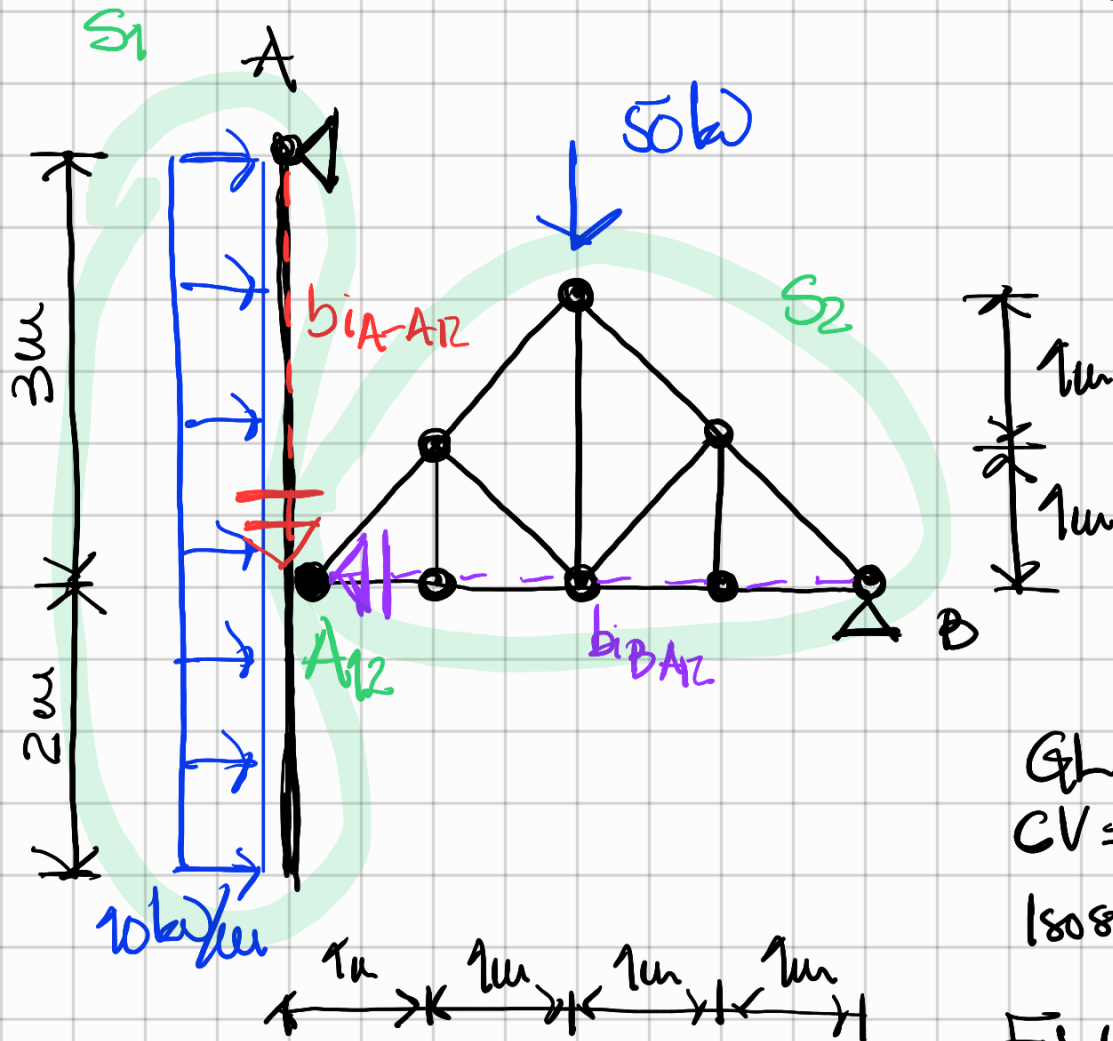
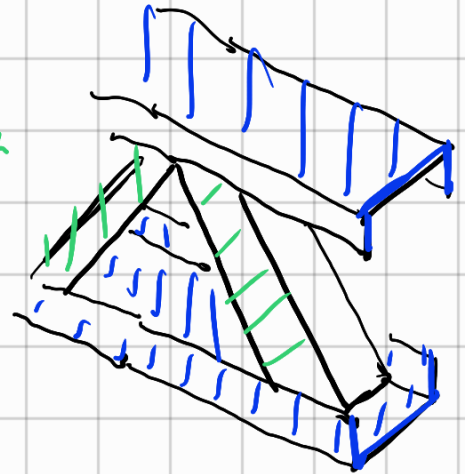
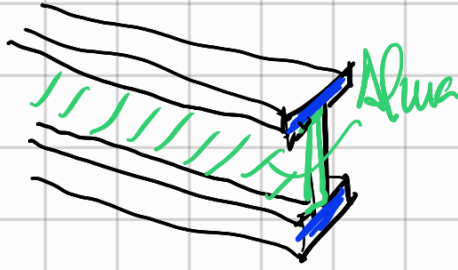


Sistemas Mixtos

Alma lisa + Reticulados
(M d N) (solo N)

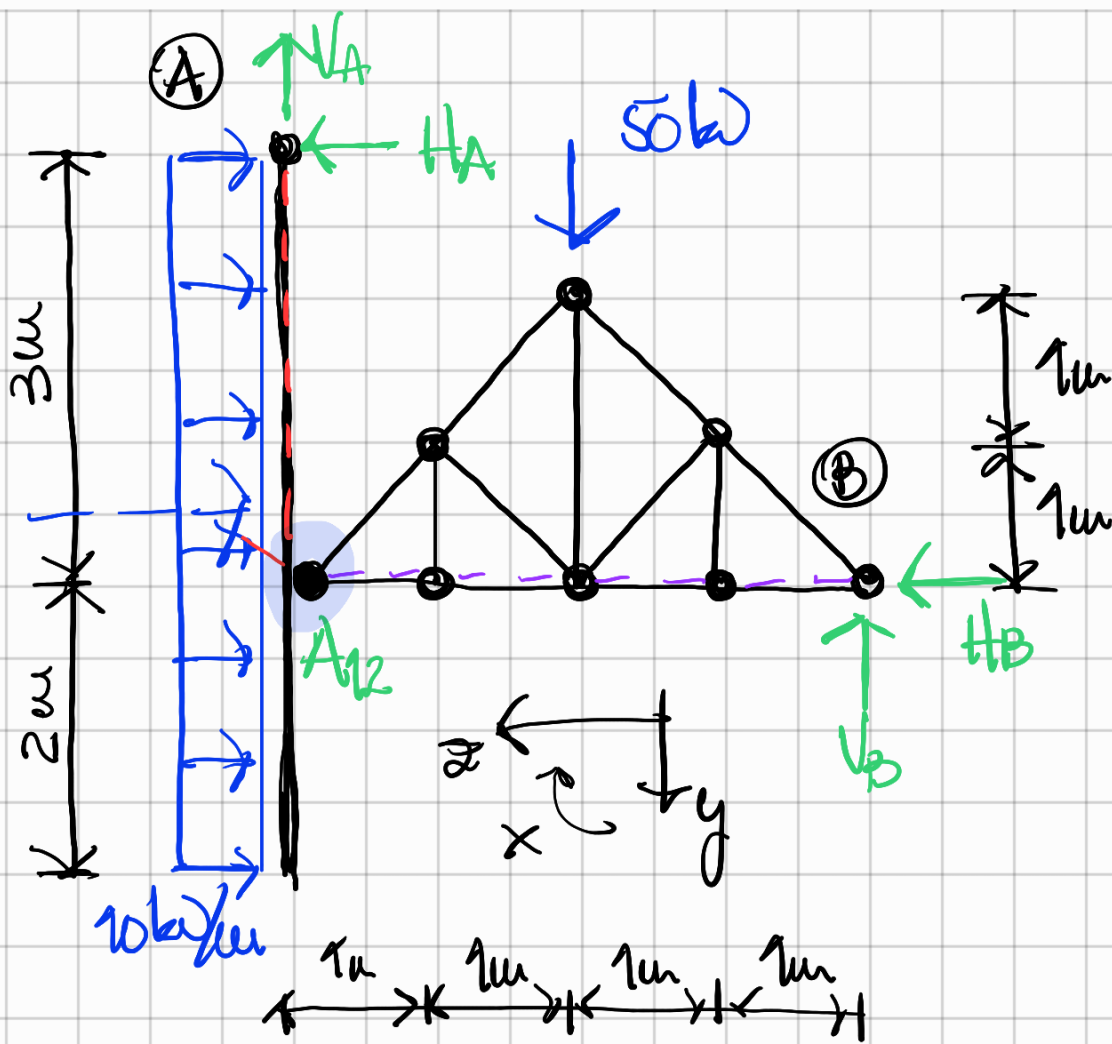


$$G_L = n + 2 = 4$$

$$C_V = 2 + 2 = 4$$

Isostático.

Es un A3A,
es cinemáticamente lm.



$$\sum M_{S_2}^{A_{12}} = 0 = 50 \text{ kN} \times 2 \text{ m} - V_B \times 4 \text{ m} \rightarrow V_B = 25 \text{ kN}$$

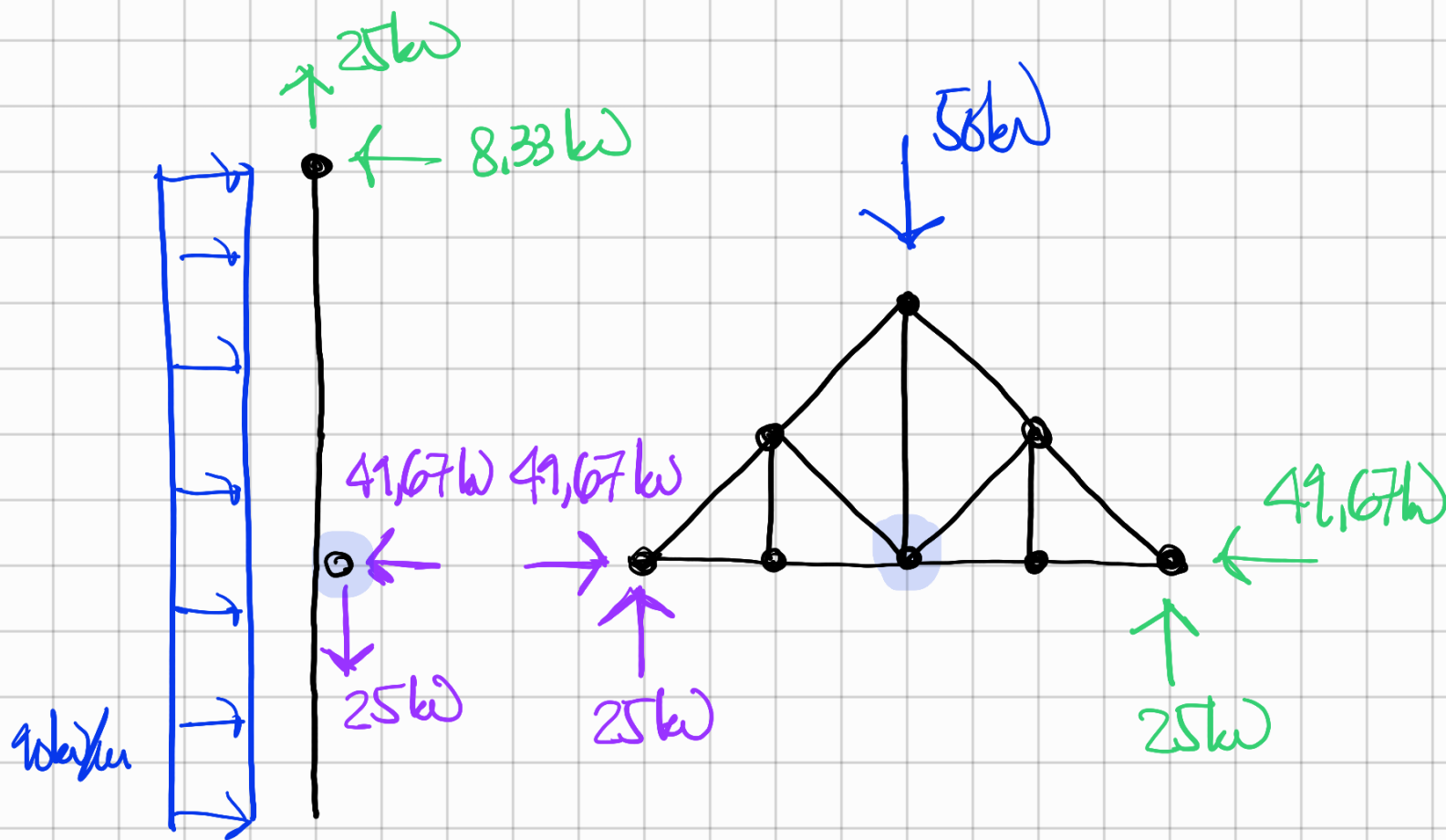
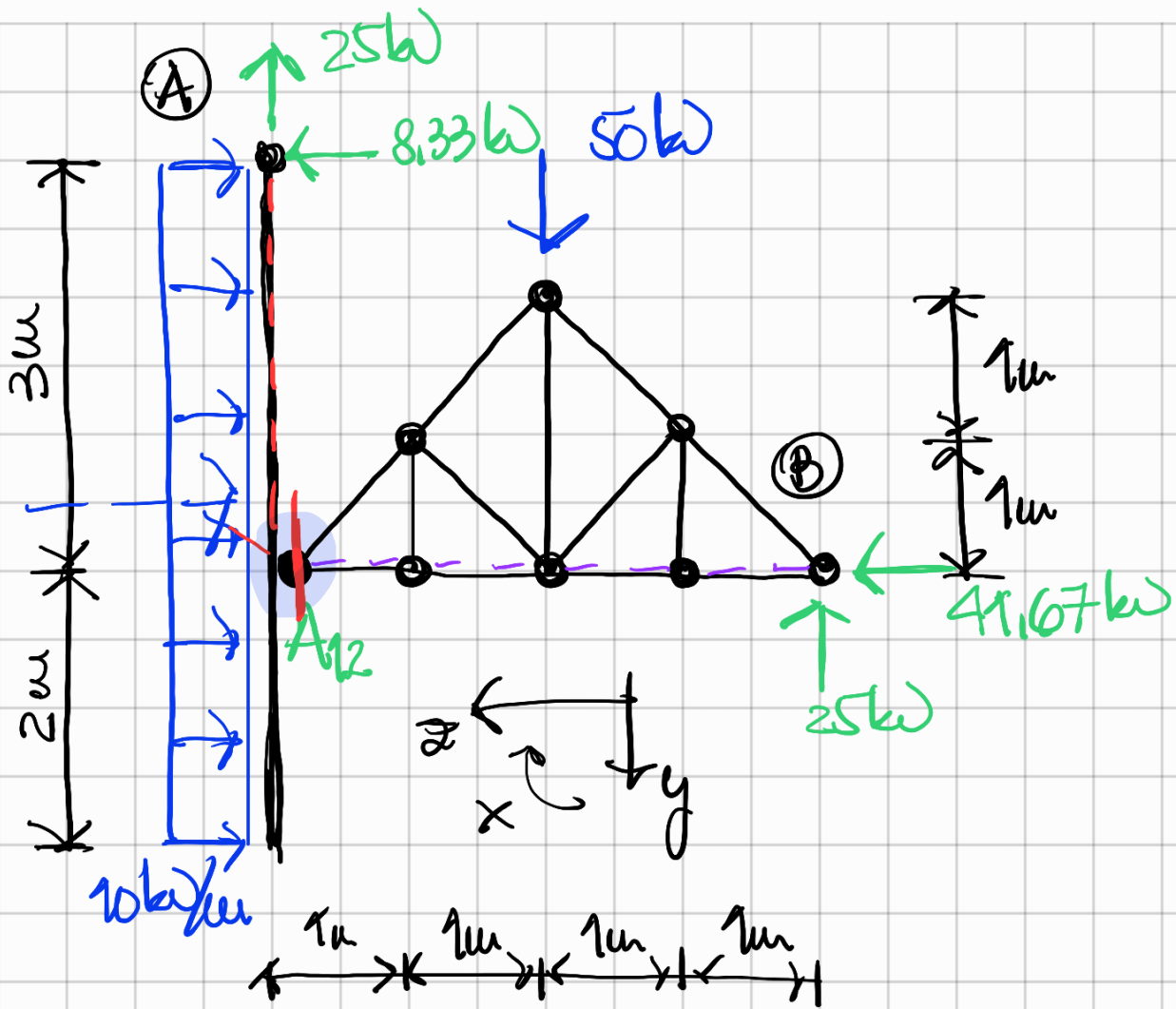
$$\sum F_y = 0 = 50 \text{ kN} - V_A - \overset{25 \text{ kN}}{V_B} \rightarrow V_A = 25 \text{ kN}$$

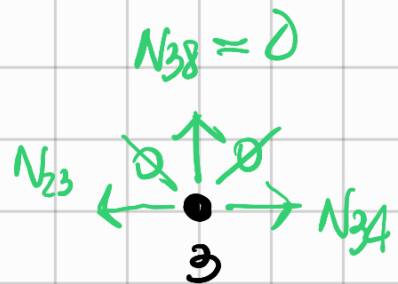
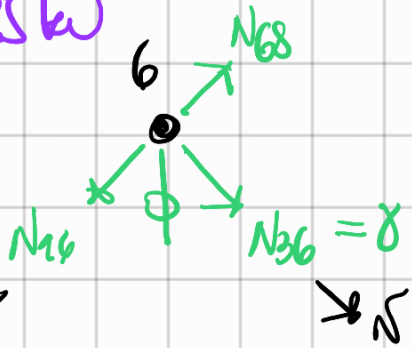
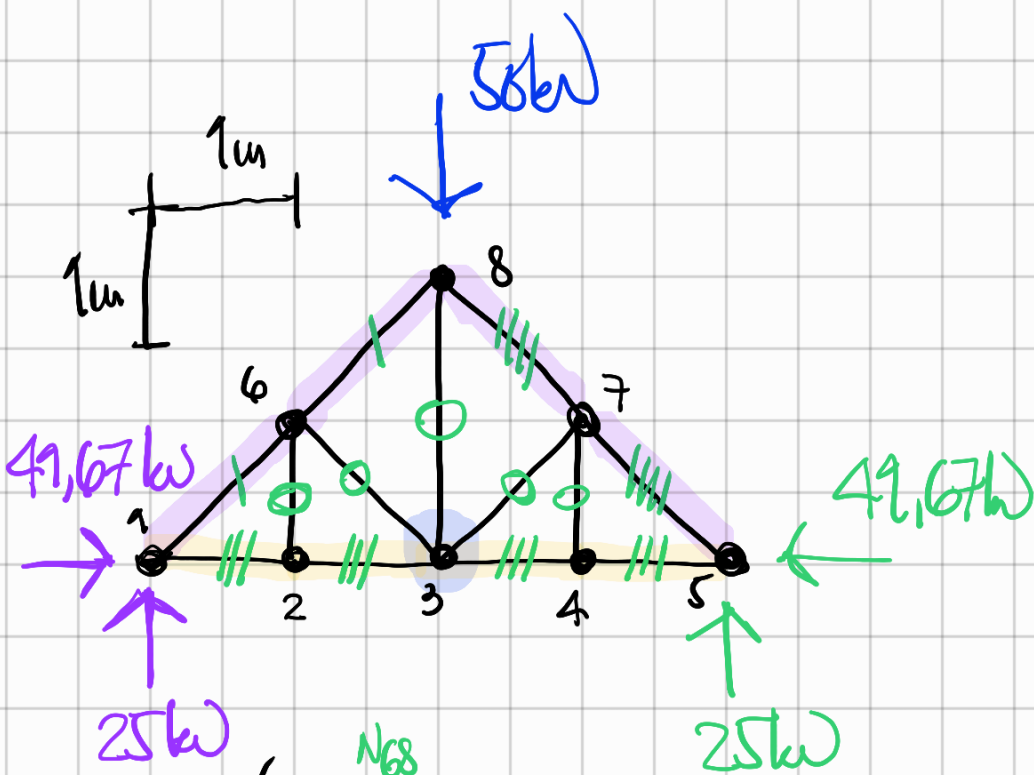
$$\sum M_{S_1}^{A_{12}} = 0 = -H_A \times 3 \text{ m} + 10 \text{ kN/m} \times 5 \text{ m} \times 0,5 \text{ m}$$

$$\rightarrow H_A = 8,33 \text{ kN}$$

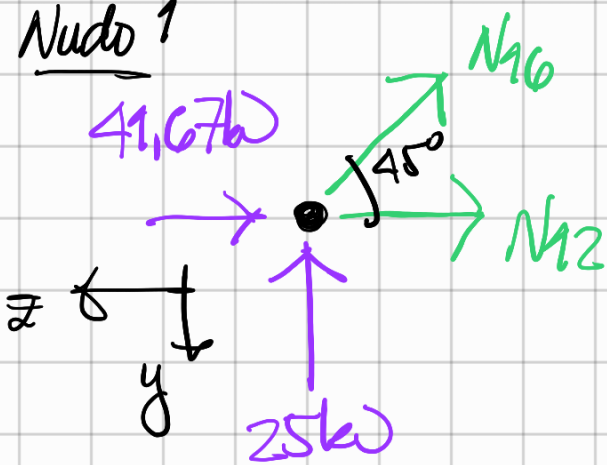
$$\sum M_{A_{12}} = \sum M_{S_1}^{A_{12}} + \sum M_{S_2}^{A_{12}}$$

$$\sum F_x = 0 = 10 \text{ kN/m} \times 5 \text{ m} + \underbrace{H_A}_{8,33 \text{ kN}} + H_B \rightarrow H_B = 41,67 \text{ kN}$$





Nudo 1

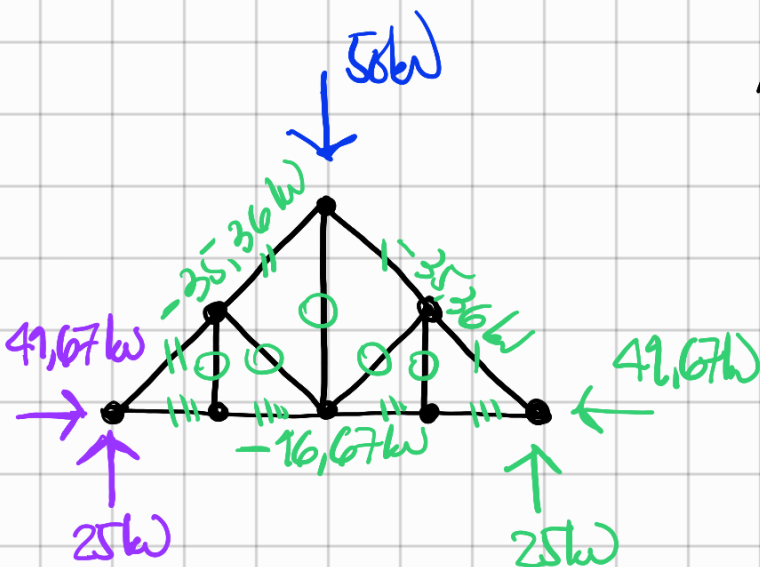


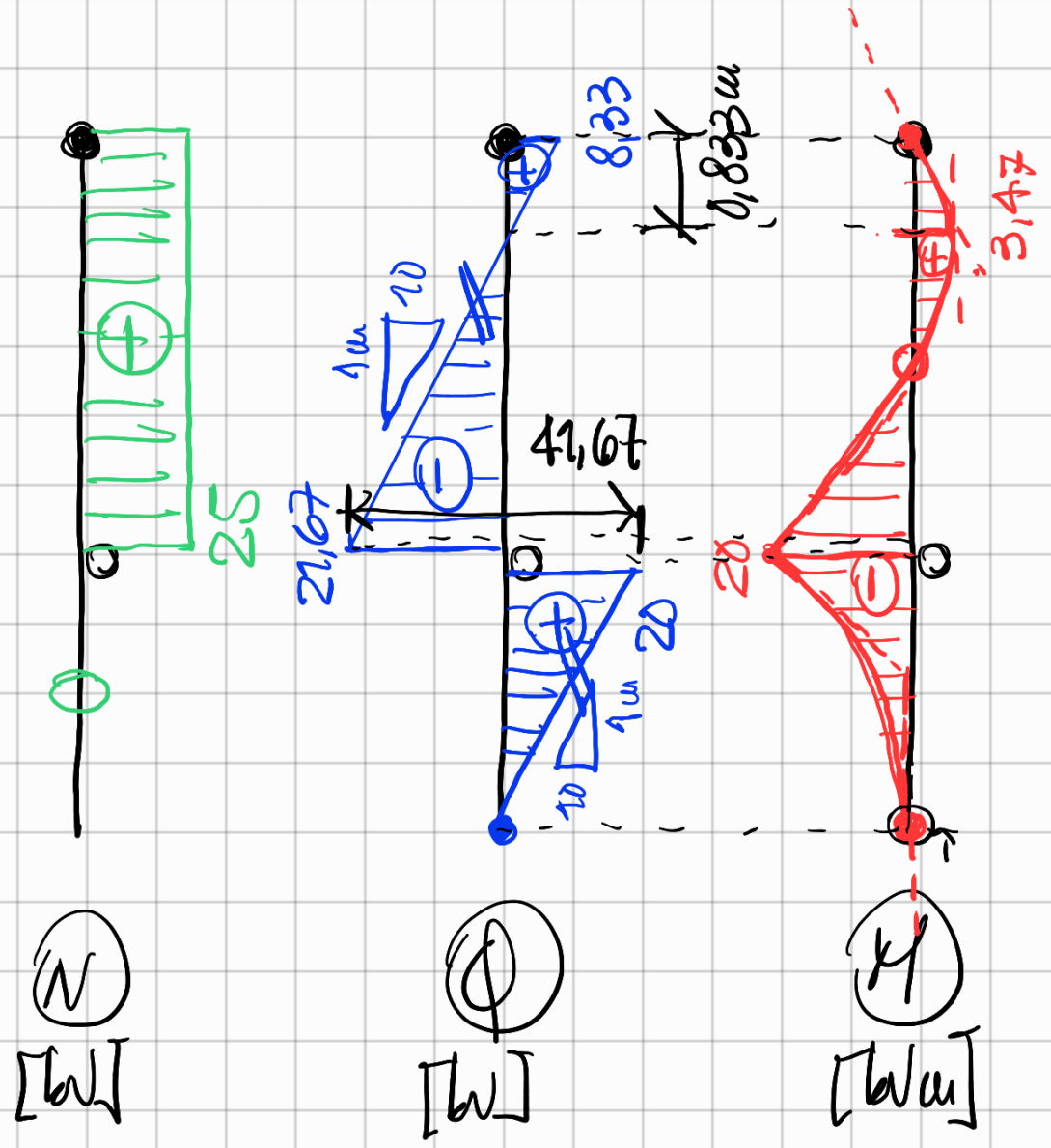
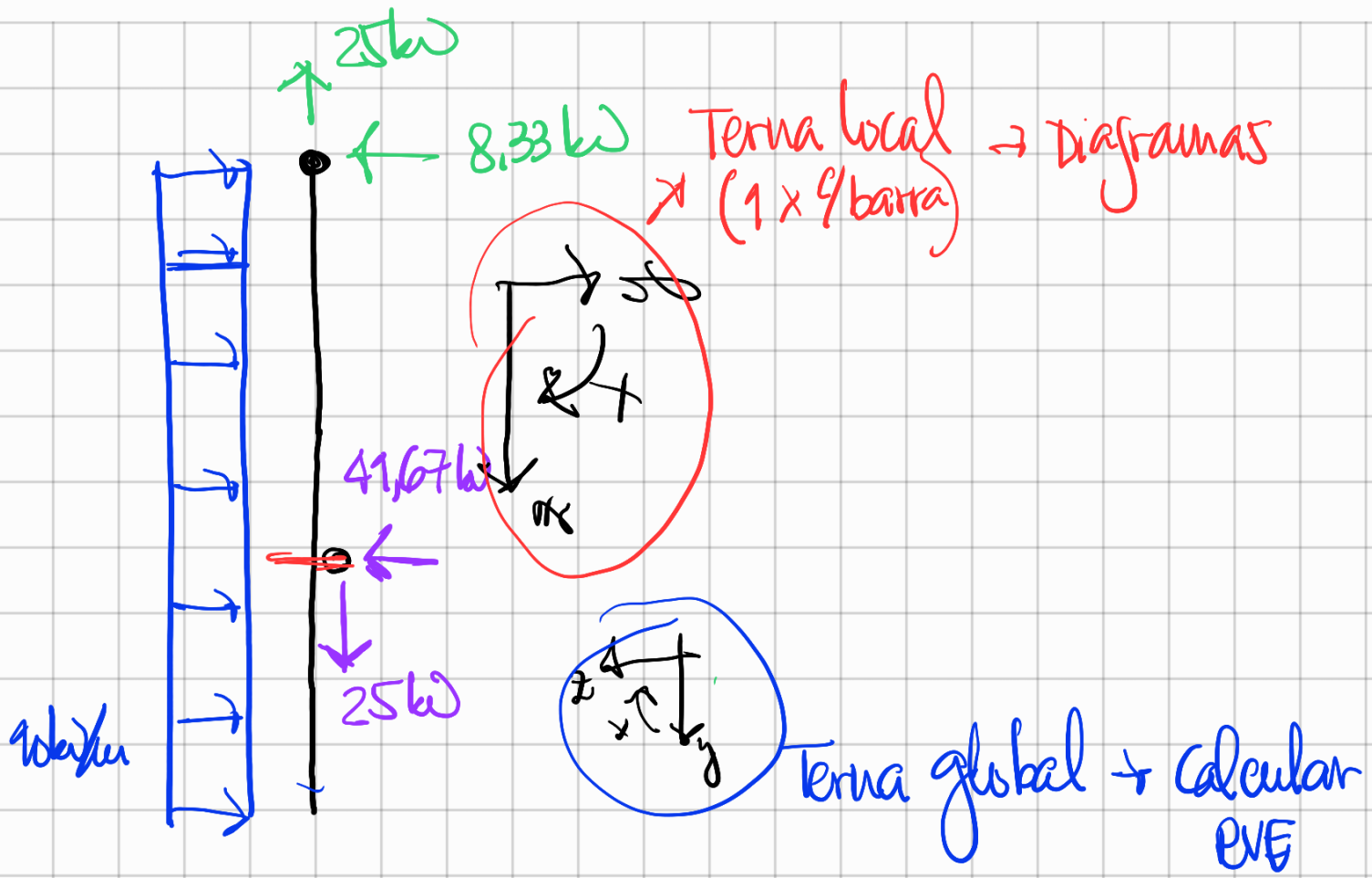
$$\sum F_y = 0 = -25\text{kN} - N_{16} \times \sin 45^\circ$$

$$N_{16} = -35,36\text{kN}$$

$$\sum F_x = 0 = -49,67\text{kN} - N_{16} \cos 45^\circ - N_{12}$$

$$N_{12} = -10,67\text{kN}$$





Temas lokal \rightarrow Diagramas

