

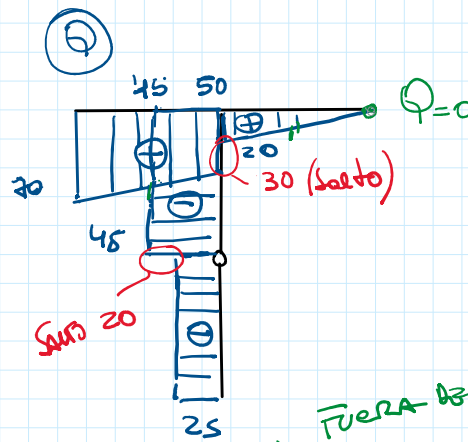
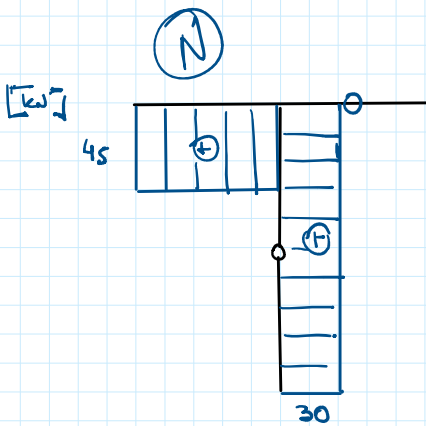
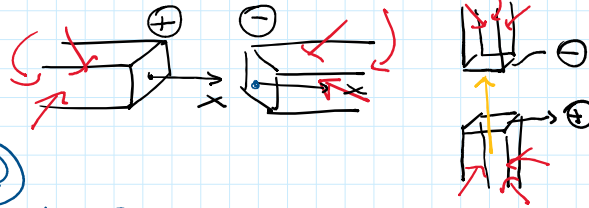
$$\sum M_z = H_B \cdot 2m - 50 \text{ kNm} = 0 \quad \boxed{H_B = 25 \text{ kN}}$$

$$\sum F_x = 0 \quad H_B + 20 \text{ kN} + H_A = 0 \quad \boxed{H_A = -45 \text{ kN}}$$

$$\sum M_z = 0 \quad -H_A \cdot 2m - V_A \cdot 2m + 50 \text{ kNm} = 0 \quad \boxed{V_A = 30 \text{ kN}}$$

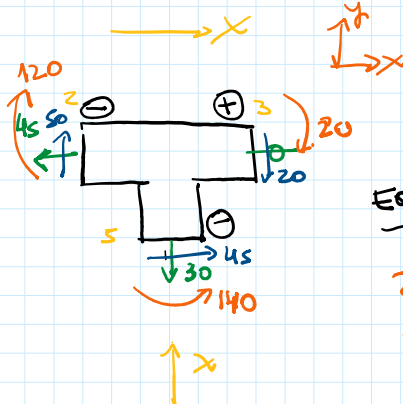
$$\sum F_y = 0 \quad V_A - 40 \text{ kN} + V_B = 0 \quad \boxed{V_B = -30 \text{ kN}}$$

$$\frac{dN}{dx} = -q_x \quad \frac{dQ}{dx} = -q_y \quad \frac{dM}{dx} = Q$$



Fuerza de ESCALA.

$$F = \frac{qL^2}{8} = \frac{10 \times 2^2}{8} = 5$$



Equilibrio del Nudo.

$$\sum F_H = -45 + 45 = 0$$

$$\sum F_V = 50 - 20 - 30 = 0$$

$$\sum M = -120 - 20 + 140 = 0$$

