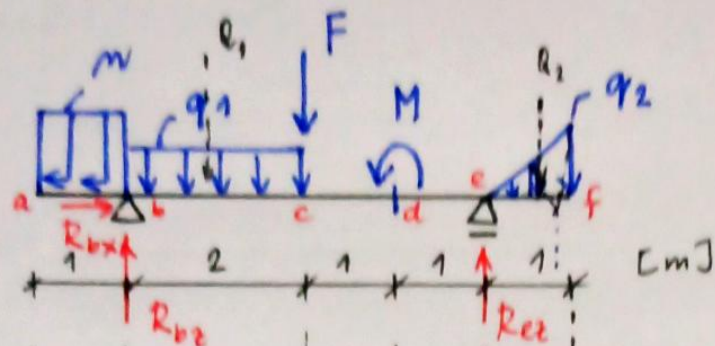
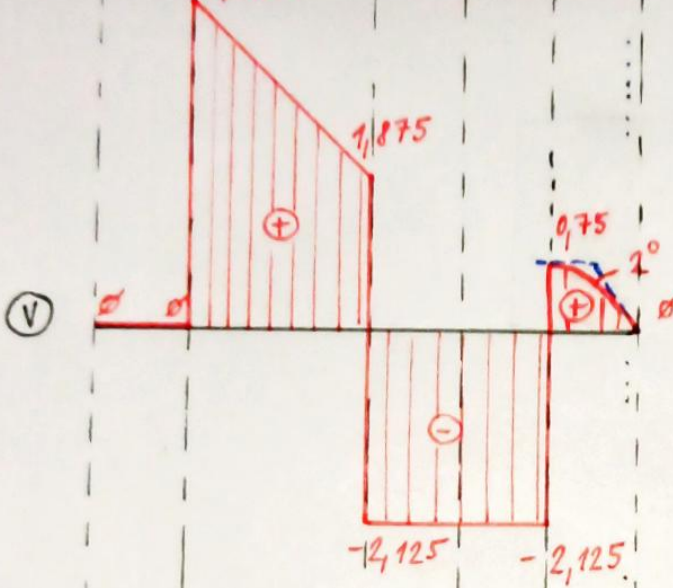
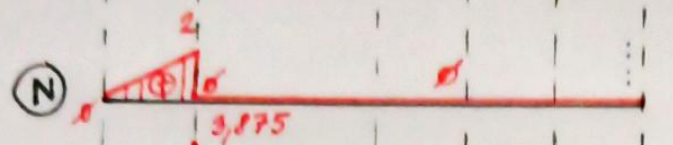




$$\begin{aligned} n &= 2 \text{ kN/m} \\ q_1 &= 1 \text{ kN/m} \\ q_2 &= 1.5 \text{ kN/m} \\ F &= 4 \text{ kN} \\ M &= 2 \text{ kNm} \end{aligned}$$



$$\begin{aligned} \sum F_{ix} = 0: & -n \cdot 1 + R_{bx} = 0 \\ R_{bx} &= n \cdot 1 = 2 \cdot 1 = \underline{2 \text{ kN}} \quad (\rightarrow) \end{aligned}$$

$$\begin{aligned} \sum M_{ib} = 0: & -q_1 \cdot 2 \cdot 1 - F \cdot 2 + M + R_{ex} \cdot 4 - \frac{1}{2} q_2 \cdot 1 \cdot \frac{2}{3} = 0 \\ R_{ex} &= \frac{1 \cdot 2 \cdot 1 + 4 \cdot 2 - 2 + \frac{1}{2} \cdot 1.5 \cdot 1 \cdot \frac{2}{3}}{4} \end{aligned}$$

$$\underline{R_{ex} = 2.875 \text{ kN}} \quad (\uparrow)$$

$$\begin{aligned} \sum M_{ic} = 0: & -R_{bz} \cdot 4 + q_1 \cdot 2 \cdot 3 + F \cdot 2 + M - \frac{1}{2} q_2 \cdot 1 \cdot \frac{2}{3} = 0 \\ R_{bz} &= \frac{1 \cdot 2 \cdot 3 + 4 \cdot 2 + 2 - \frac{1}{2} \cdot 1.5 \cdot 1 \cdot \frac{2}{3}}{4} \end{aligned}$$

$$\underline{R_{bz} = 3.875 \text{ kN}} \quad (\uparrow)$$

$$\begin{aligned} \sum F_{iz} = 0: & R_{bz} + R_{ex} - q_1 \cdot 2 - F - \frac{1}{2} q_2 \cdot 1 = 0 \\ 3.875 + 2.875 - 1 \cdot 2 - 4 - \frac{1}{2} \cdot 1.5 \cdot 1 &= 0 \quad \checkmark \end{aligned}$$

$$f = \frac{1}{8} q_1 \cdot l^2 = \frac{1}{8} \cdot 1 \cdot 2^2 = 0.5$$