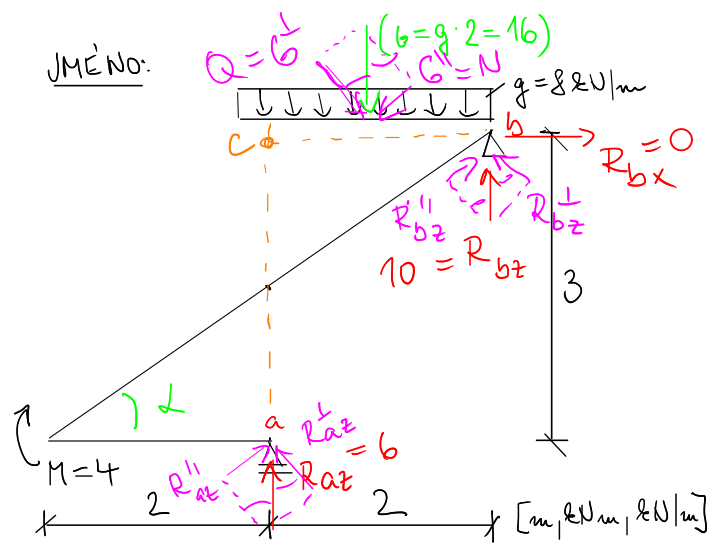


JMÉ NO.:



$$l = 5 \text{ m}$$

$$\sin \alpha = \frac{3}{5}$$

$$\cos \alpha = \frac{4}{5}$$

$$\sum F_{xi} = 0 : R_{bx} = 0$$

$$\sum M_{bi} = 0 : M + R_{az} \cdot 2 - G \cdot 1 = 0 \Rightarrow R_{az} = 6 \text{ kN}$$

$$\sum M_{ci} = 0 : -M - G \cdot 1 + R_{bz} \cdot 2 = 0 \Rightarrow R_{bz} = 10 \text{ kN}$$

$$\sum F_{zi} = 0 : R_{az} + R_{bz} - G = 0 \quad \checkmark$$

$$R_{bz}^\perp = R_{bz} \cdot \cos \alpha = 10 \cdot \frac{4}{5} = 8 \text{ kN}$$

$$R_{bz}^\parallel = R_{bz} \cdot \sin \alpha = 10 \cdot \frac{3}{5} = 6 \text{ kN}$$

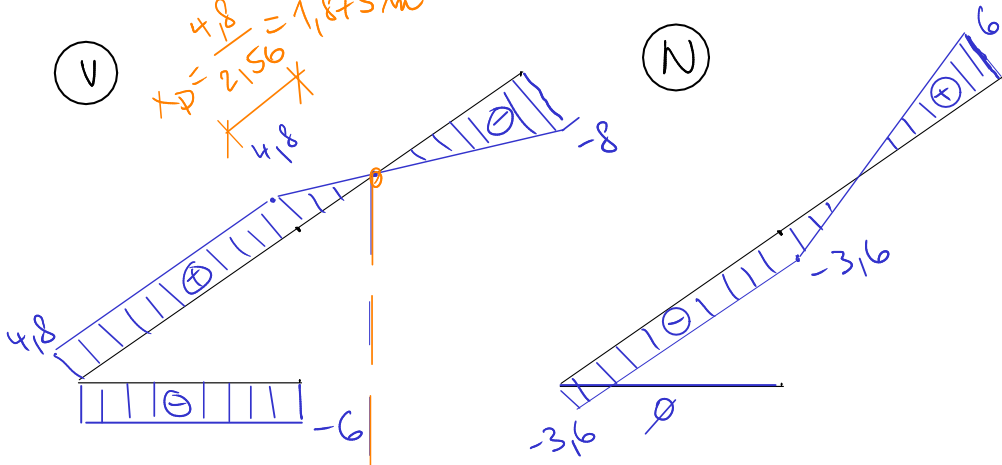
$$Q = G^\perp = G \cdot \cos \alpha = 16 \cdot \frac{4}{5} = 12,8 \text{ kN} \Rightarrow q = \frac{Q}{l} = 2,56 \text{ kN/m}$$

$$N = G^\parallel = G \cdot \sin \alpha = 16 \cdot \frac{3}{5} = 9,6 \text{ kN} \Rightarrow n = \frac{N}{l} = 1,92 \text{ kN/m}$$

(V)

$$x_p = \frac{4,8}{2,56} = 1,875 \text{ m}$$

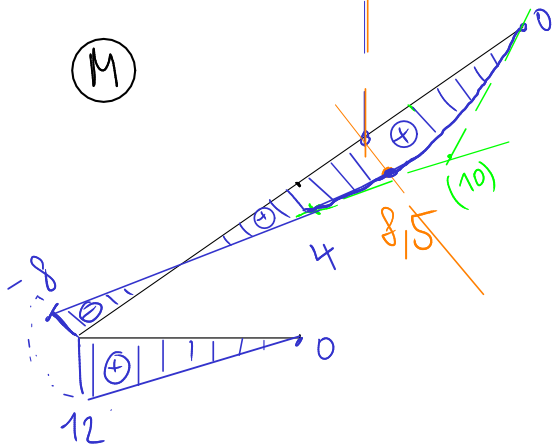
(N)



$$R_{az}^\parallel = R_{az} \cdot \sin \alpha = 6 \cdot \frac{3}{5} = 3,6 \text{ kN} \quad \checkmark$$

$$R_{az}^\perp = R_{az} \cdot \cos \alpha = 6 \cdot \frac{4}{5} = 4,8 \text{ kN} \quad \checkmark$$

(M)



$$f = \frac{1}{8} q l^2 = \frac{1}{8} \cdot 2,56 \cdot 2,5^2 = 2$$

$$M_{\max} = 4 + \frac{1}{2} \cdot 1,875 \cdot 4,8 = 8,5 \text{ kNm}$$