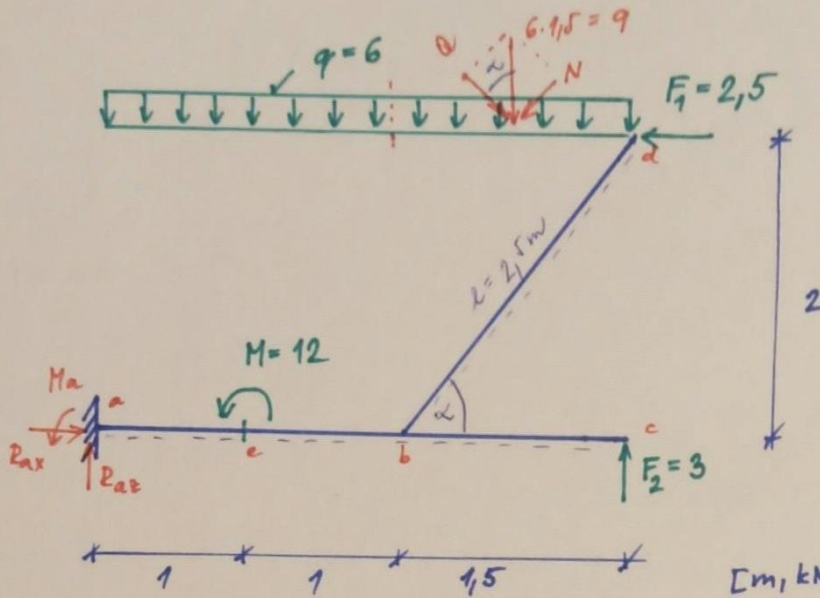


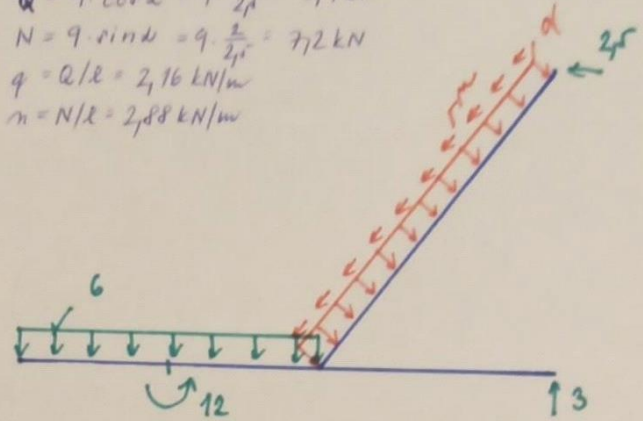


$$Q = q \cdot \cos \alpha = q \cdot \frac{2}{2.5} = 5.4 \text{ kN}$$

$$N = q \cdot \sin \alpha = q \cdot \frac{1.5}{2.5} = 7.2 \text{ kN}$$

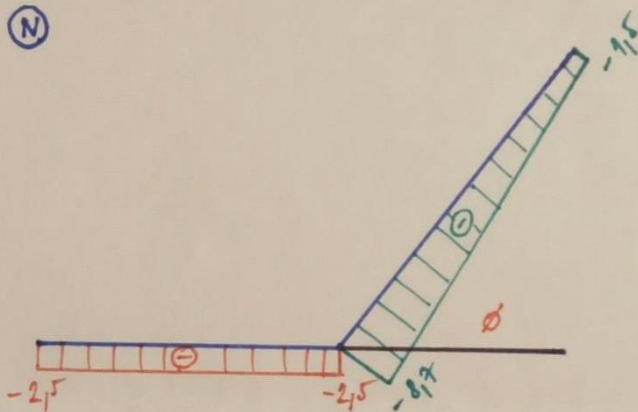
$$q = Q/l = 2.16 \text{ kN/m}$$

$$n = N/l = 2.88 \text{ kN/m}$$



[m, kN, kNm, kN/m]

(N)



$$\oplus \rightarrow \sum F_{ix} = 0 : R_{Ax} - F_1 = 0$$

$$R_{Ax} = F_1 = 2.5 \text{ kN} \quad (\rightarrow)$$

$$\oplus \uparrow \sum F_{iz} = 0 : R_{Az} + F_2 - q \cdot 3.5 = 0$$

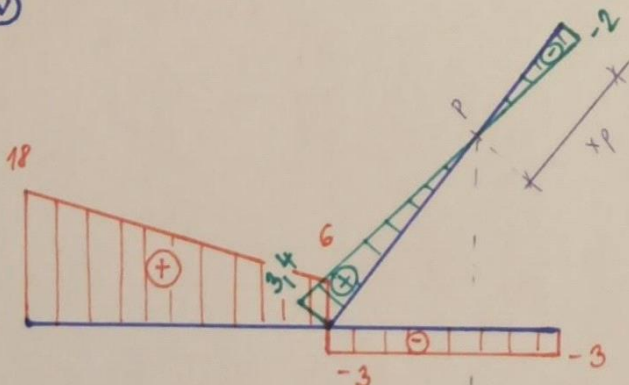
$$R_{Az} = -3 + 6 \cdot 3.5 = 18 \text{ kN} \quad (\uparrow)$$

$$\oplus \curvearrowright \sum M_{ia} = 0 : M_a + M + F_2 \cdot 3.5 + F_1 \cdot 2 - q \cdot 3.5^2 \cdot \frac{1}{2} = 0$$

$$M_a = -12 - 3 \cdot 3.5 - 2.5 \cdot 2 + 6 \cdot 3.5^2 \cdot \frac{1}{2}$$

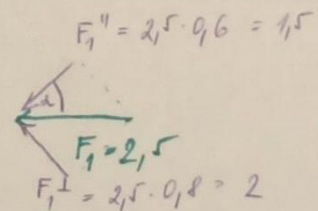
$$M_a = 9.25 \text{ kNm} \quad (\curvearrowright)$$

(V)



$$\cos \alpha = 0.6$$

$$\sin \alpha = 0.8$$



$$V_P = 0 : -F_1^{\perp} + q \cdot x_P = 0$$

$$x_P = \frac{2}{2.16} = 0.925 \text{ m}$$

$$M_P^P = F_1^{\perp} \cdot x_P - q \cdot x_P^2 \cdot \frac{1}{2} =$$

$$= 2 \cdot 0.925 - 2.16 \cdot 0.925^2 \cdot \frac{1}{2} = 0.925 \text{ kNm}$$

(M)

