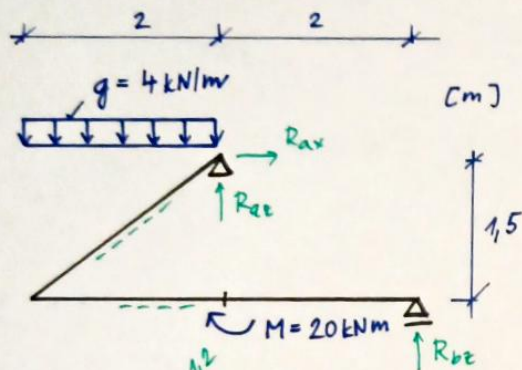
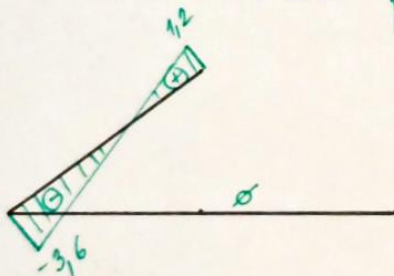


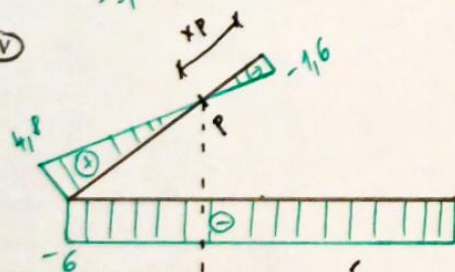
st 8⁰⁰ - 1



(N)



(V)



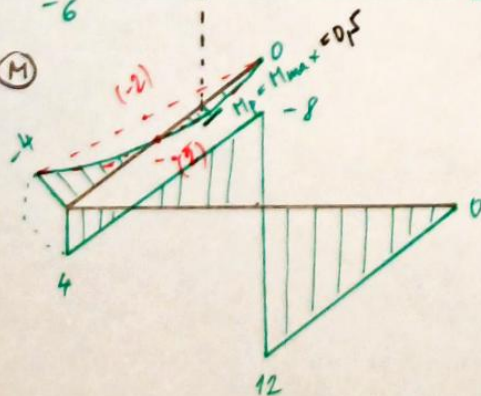
$$V_P^P = 0: -R_{bz} + g \cdot x_P = 0$$

$$x_P = \frac{R_{bz}}{g} = \frac{1.6}{4} = 0.4 \text{ m}$$

$$VTP^P = R_{bz} \cdot 1 = 2 \cdot 1 = 2$$

$$M_P = M_{max} = 0 - \int_0^1 V dx = 0 - \frac{1}{2} (-1.6) \cdot 0.625 = 0.5 \text{ kNm}$$

(M)



st 8⁰⁰ - 1

$$\sum F_{ix} = 0: R_{ax} = 0$$

$$\sum M_{ia} = 0: g \cdot 2 \cdot 1 - M + R_{bz} \cdot 2 = 0$$

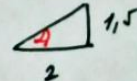
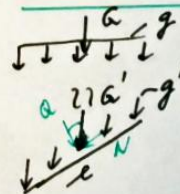
$$R_{bz} = \frac{-4 \cdot 2 \cdot 1 + 20}{2} = 6 \text{ kN}$$

$$\sum M_{ib} = 0: g \cdot 2 \cdot 3 - R_{ax} \cdot 1.5 - R_{bz} \cdot 2 - M = 0$$

$$R_{ax} = \frac{4 \cdot 2 \cdot 3 - 0 - 20}{2} = 2 \text{ kN}$$

$$K: \sum F_{iz} = 0: R_{ax} + R_{bz} - g \cdot 2 = 0$$

$$2 + 6 - 4 \cdot 2 = 0 \checkmark$$



$$L = \sqrt{2^2 + 1.5^2} = 2.5 \text{ m}$$

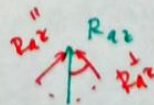
$$\sin \alpha = \frac{1.5}{2.5} = 0.6$$

$$\cos \alpha = \frac{2}{2.5} = 0.8$$

$$g \cdot 2 = g' \cdot 2.5 \Rightarrow g' = \frac{4 \cdot 2}{2.5} = 3.2 \text{ kN/m}$$

$$g'' = g' \cdot \cos \alpha = 3.2 \cdot 0.8 = 2.56 \text{ kN/m}$$

$$n = g' \cdot \sin \alpha = 3.2 \cdot 0.6 = 1.92 \text{ kN/m}$$



$$R_{ax}^{\perp} = R_{ax} \cdot \cos \alpha = 2 \cdot 0.8 = 1.6 \text{ kN}$$

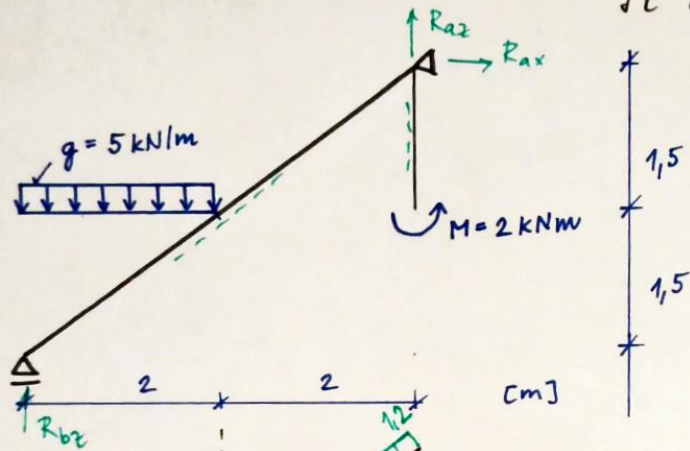
$$R_{ax}^{\parallel} = R_{ax} \cdot \sin \alpha = 2 \cdot 0.6 = 1.2 \text{ kN}$$



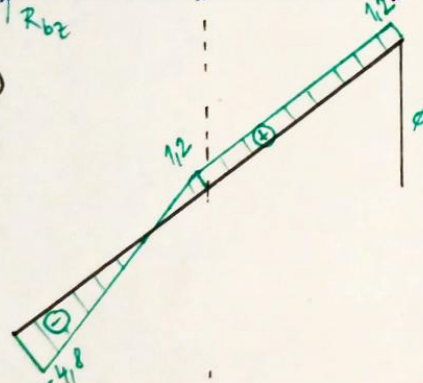
$$R_{bz}^{\perp} = R_{bz} \cdot \cos \alpha = 6 \cdot 0.8 = 4.8 \text{ kN}$$

$$R_{bz}^{\parallel} = R_{bz} \cdot \sin \alpha = 6 \cdot 0.6 = 3.6 \text{ kN}$$

st 800-2



(2)



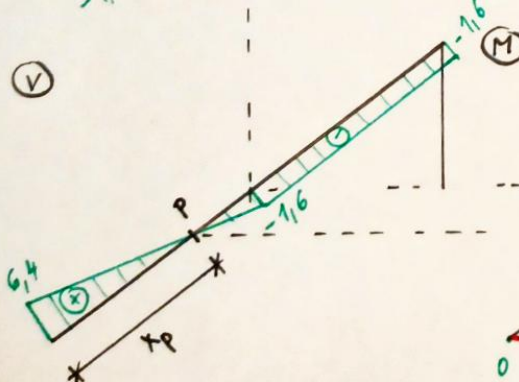
$$V_P = 0: R_{bz}^{\perp} - g \cdot x_P = 0$$

$$x_P = \frac{R_{bz}^{\perp}}{g} = \frac{6.4}{3.2} = 2 \text{ m}$$

$$VTP^L = R_{bz} \cdot 1 = 8 \cdot 1 = 8$$

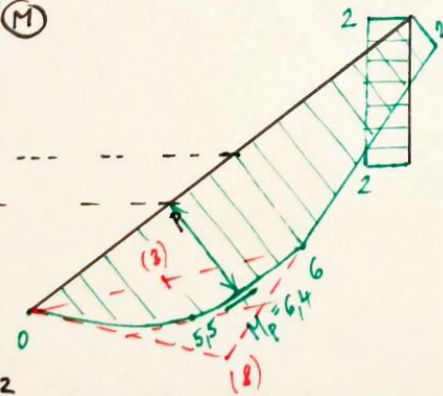
$$f = \frac{1}{2} g l^2 = \frac{1}{2} \cdot 3.2 \cdot 2.5^2 = 2.5$$

(V)



$$M_P = M_{max} = R_{bz}^{\perp} \cdot x_P - g \cdot \frac{x_P^2}{2}$$

$$= 6.4 \cdot 2 - 3.2 \cdot \frac{2^2}{2} = 6.4 \text{ kNm}$$



st 800-2

$$\sum F_{ix} = 0: R_{ax} = 0$$

$$\sum M_{ia} = 0: M + g \cdot 2.3 - R_{bz} \cdot 4 = 0$$

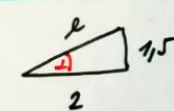
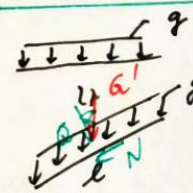
$$R_{bz} = \frac{2 + 5 \cdot 2.3}{4} = 8 \text{ kN}$$

$$\sum M_{ib} = 0: -g \cdot 2.1 + M + R_{az} \cdot 4 - R_{ax} \cdot 3 = 0$$

$$R_{az} = \frac{5 \cdot 2.1 - 2 + 0}{4} = 2 \text{ kN}$$

$$K: \sum F_{iz} = 0: R_{bz} + R_{az} - g \cdot 2 = 0$$

$$8 + 2 - 5 \cdot 2 = 0 \checkmark$$



$$l = \sqrt{2^2 + 1.5^2} = 2.5 \text{ m}$$

$$\sin \alpha = \frac{1.5}{2.5} = 0.6$$

$$\cos \alpha = \frac{2}{2.5} = 0.8$$

$$g \cdot 2 = g' \cdot l$$

$$g' = \frac{5 \cdot 2}{2.5} = 4 \text{ kN/m}$$

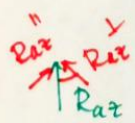
$$g = g' \cdot \cos \alpha = 4 \cdot 0.8 = 3.2 \text{ kN/m}$$

$$m = g' \cdot \sin \alpha = 4 \cdot 0.6 = 2.4 \text{ kN/m}$$



$$R_{bz}^{\perp} = R_{bz} \cdot \cos \alpha = 8 \cdot 0.8 = 6.4 \text{ kN}$$

$$R_{bz}^{\parallel} = R_{bz} \cdot \sin \alpha = 8 \cdot 0.6 = 4.8 \text{ kN}$$



$$R_{az}^{\perp} = R_{az} \cdot \cos \alpha = 2 \cdot 0.8 = 1.6 \text{ kN}$$

$$R_{az}^{\parallel} = R_{az} \cdot \sin \alpha = 2 \cdot 0.6 = 1.2 \text{ kN}$$