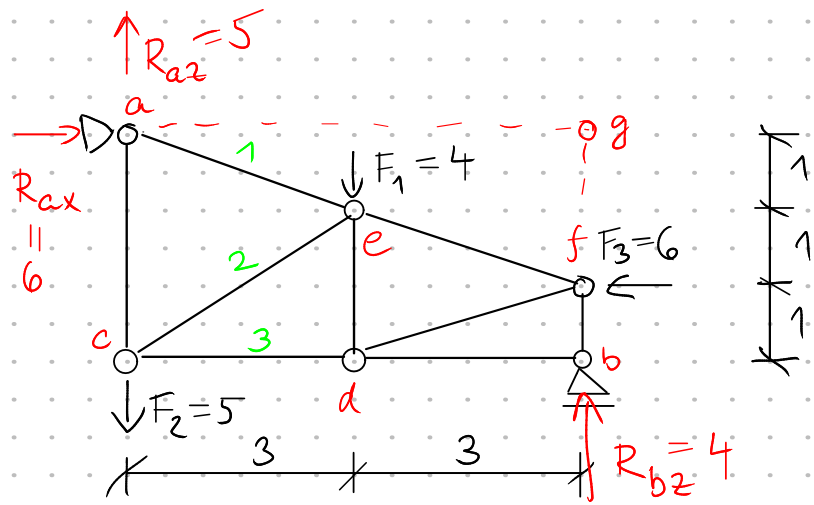




Reakce:

$$\sum F_{xi} = 0 \oplus \rightarrow R_{ax} - F_3 = 0 \Rightarrow \underline{R_{ax} = F_3 = 6 \text{ kN}}$$

$$\sum M_{ai} = 0 \oplus \uparrow R_{bz} \cdot 6 - F_3 \cdot 2 - F_1 \cdot 3 = 0$$

$$\underline{R_{bz} = 4 \text{ kN}}$$

$$\sum M_{gi} = 0 \oplus \downarrow R_{az} \cdot 6 - F_2 \cdot 6 - F_1 \cdot 3 + F_3 \cdot 2 = 0$$

$$\underline{R_{az} = 5 \text{ kN}}$$

kontrola: $\sum F_{zi} = 0 \oplus \uparrow$

$$R_{az} - F_2 - F_1 + R_{bz} = 0 \checkmark$$

$\sum M_{ei} = 0 \oplus \uparrow$ ($e \equiv N_1 \cap N_2$)

$$-R_{az} \cdot 3 + F_2 \cdot 3 - R_{ax} \cdot 1 + N_3 \cdot 2 = 0$$

$$N_3 = \frac{R_{ax} \cdot 1}{2} = \underline{3 \text{ kN (T\AA H)}}$$

$\sum M_{hi} = 0 \oplus \downarrow$ ($h \equiv N_3 \cap N_1$)

$$R_{az} \cdot 9 - F_2 \cdot 9 + R_{ax} \cdot 3 + N_{1z} \cdot 9 = 0$$

$$N_1 = \frac{-3 R_{ax}}{9 \cdot \sin \beta} = \underline{-3,606 \text{ kN (TL\AA K)}}$$

kontrola $\sum F_{xi} = 0 \oplus \rightarrow \sum F_{zi} = 0 \oplus \uparrow$

$$R_{ax} + N_{1x} + N_3 + N_{2x} = 0$$

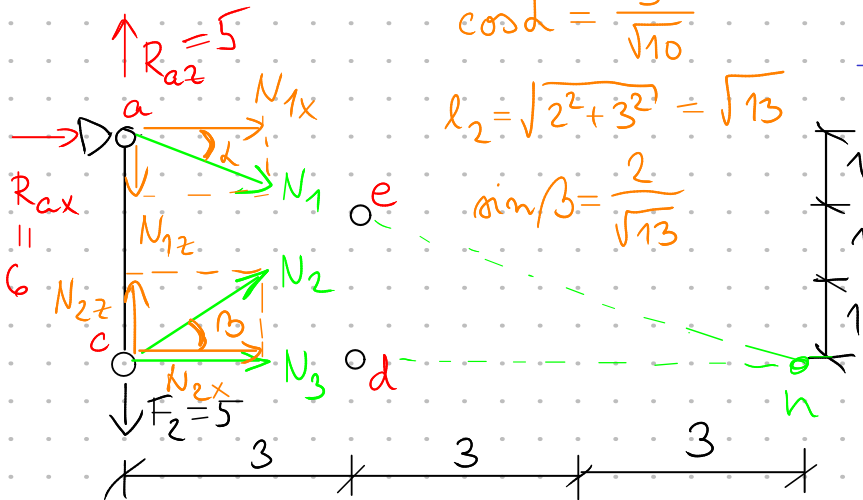
$$R_{az} - N_{1z} + N_{2z} - F_2 = 0$$

$$l_1 = \sqrt{1^2 + 3^2} = \sqrt{10}$$

$$\cos \alpha = \frac{3}{\sqrt{10}}$$

$$l_2 = \sqrt{2^2 + 3^2} = \sqrt{13}$$

$$\sin \beta = \frac{2}{\sqrt{13}}$$



$\sum M_{ci} = 0 \oplus \downarrow$ ($c \equiv N_2 \cap N_3$)

$$N_{1x} \cdot 3 + R_{ax} \cdot 3 = 0$$

$$N_1 = \frac{-R_{ax} \cdot 3}{3 \cos \alpha} = \underline{-6,325 \text{ kN (TL\AA K)}}$$