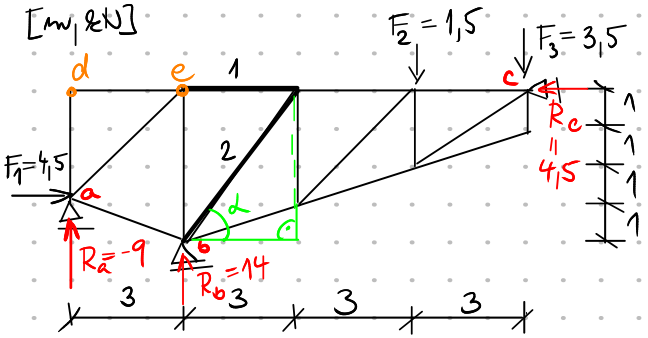


$\Sigma F_{xi} = 0 : \oplus \rightarrow$

$F_1 - R_c = 0$

$R_c = F_1 = 4,5\ kN$

$\Sigma M_{ei} = 0 : \oplus \circlearrowleft$

$R_a \cdot 3 - F_1 \cdot 3 + F_2 \cdot 6 + F_3 \cdot 9 = 0$

$R_a = \frac{4,5 \cdot 3 - 1,5 \cdot 6 - 3,5 \cdot 9}{3} = -9\ kN$

$\Sigma M_{di} = 0 : \oplus \circlearrowleft$

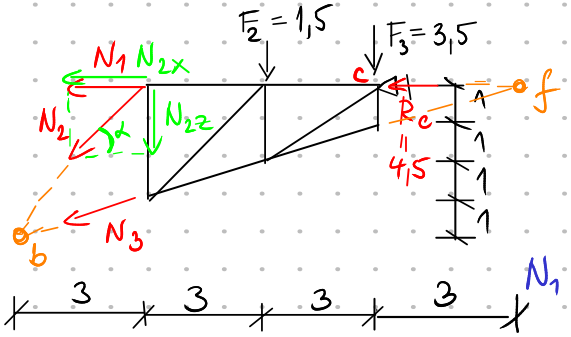
$F_1 \cdot 3 + R_b \cdot 3 - F_2 \cdot 9 - F_3 \cdot 12 = 0$

$R_b = \frac{-4,5 \cdot 3 + 1,5 \cdot 9 + 3,5 \cdot 12}{3} = 14\ kN$

$\Sigma F_{zi} = 0 \oplus \uparrow$

$R_a + R_b - F_2 - F_3 = 0$

$-9 + 14 - 1,5 - 3,5 = 0$ ✓



$\Sigma M_{bi} = 0 : \oplus \circlearrowleft$

$N_1 \cdot 4 - F_2 \cdot 6 - F_3 \cdot 9 + R_c \cdot 4 = 0$

$N_1 = \frac{1,5 \cdot 6 + 3,5 \cdot 9 - 4,5 \cdot 4}{4} = 5,625\ kN$ (TAH)

$\Sigma M_{fi} = 0 : \oplus \circlearrowleft \quad N_{2z} \cdot 9 + F_2 \cdot 6 + F_3 \cdot 3 = 0$

$l_2 = 5\ m$

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

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

$N_2 = \frac{-1,5 \cdot 6 - 3,5 \cdot 3}{9 \cdot \sin\alpha} = -2,7083\ kN$ (TLAK)

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

↓9 ↓1,5 ← 4,5

4 | −5,53