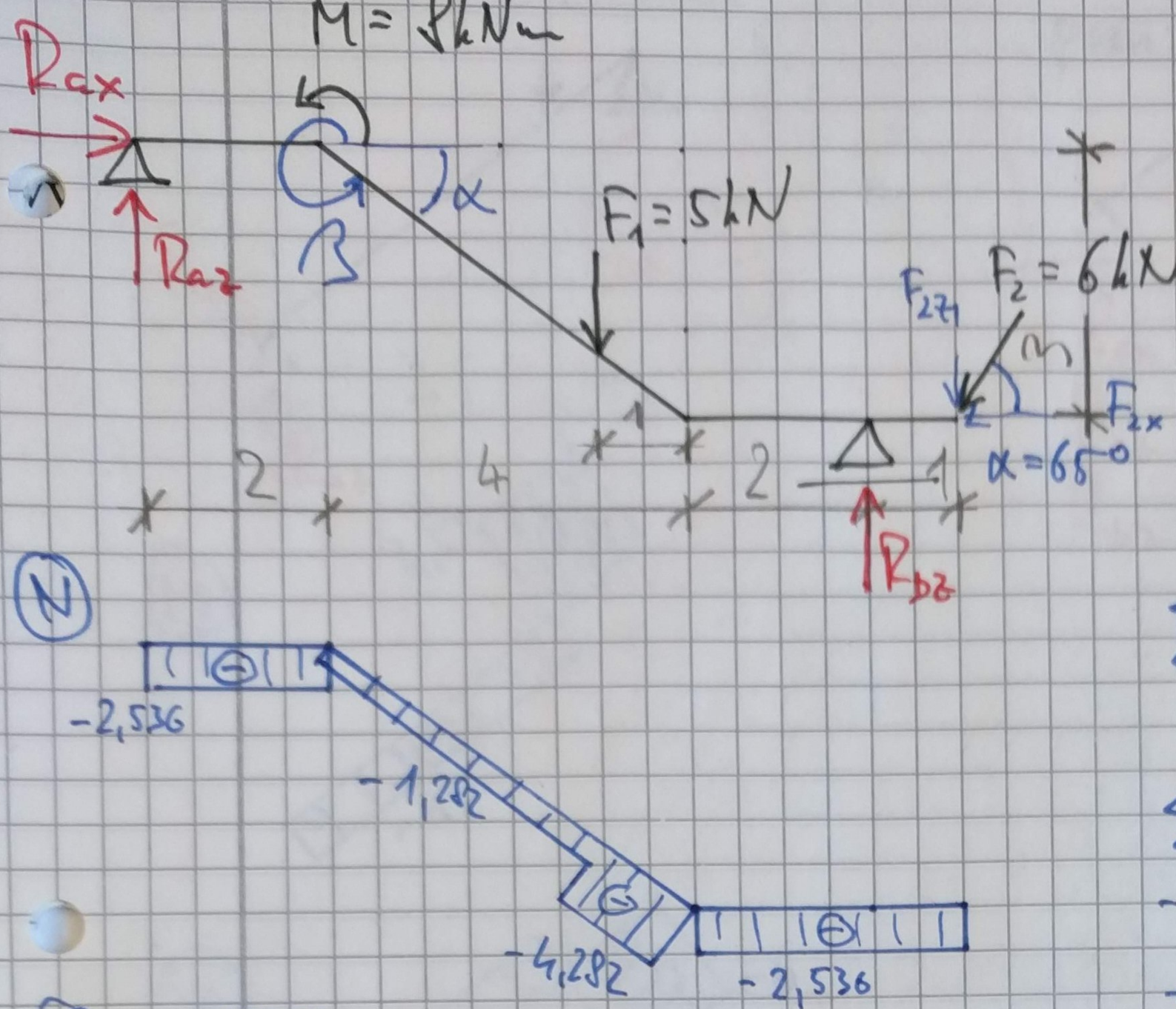
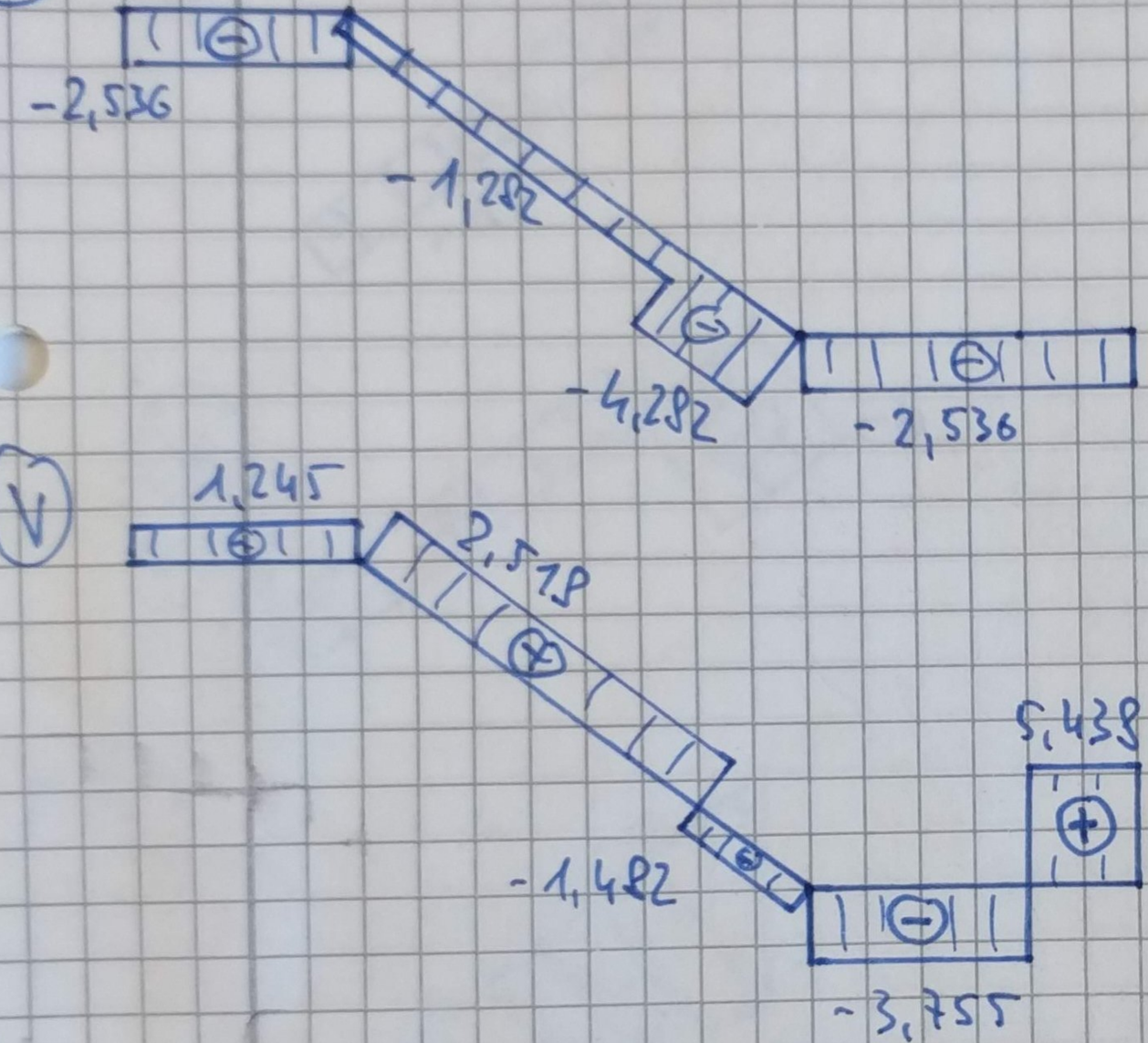




$F_{2z} = 5,438\,kN$

$F_{2x} = 2,536\,kN$

$\sum M_{ia} = 0 : \circlearrowleft +$

$M - F_1 \cdot 5 + R_{bz} \cdot 8 - F_{2z} \cdot 9 - F_{2x} \cdot 3 = 0$

$R_{bz} = 9,194\,kN\ (\uparrow)$

$\sum F_{ix} = 0$

$R_{ax} = 2,536\,kN\ (\rightarrow)$

$\sum M_{ib} = 0 \circlearrowleft +$

$-R_{ax} \cdot 3 - R_{az} \cdot 8 + M + F_1 \cdot 3 - F_{2z} \cdot 1 = 0$

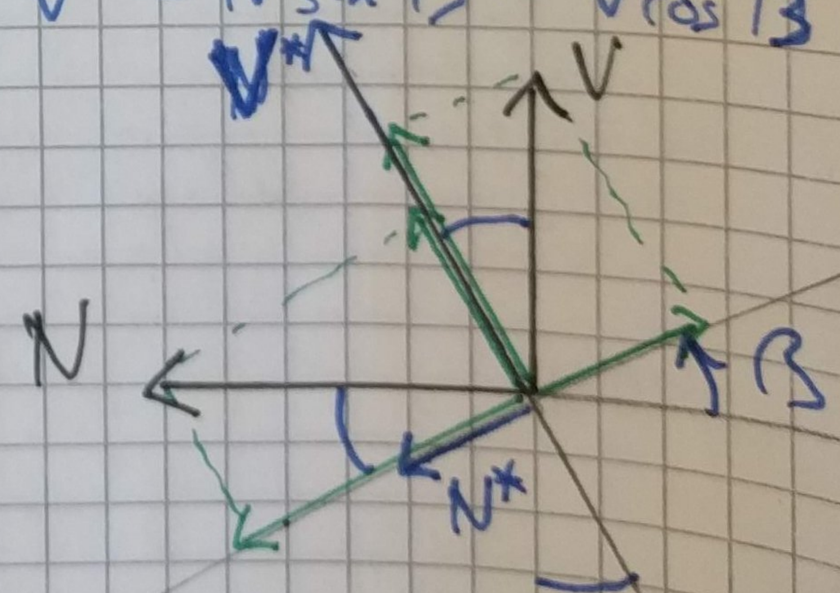
$R_{az} = 1,245\,kN\ (\uparrow)$

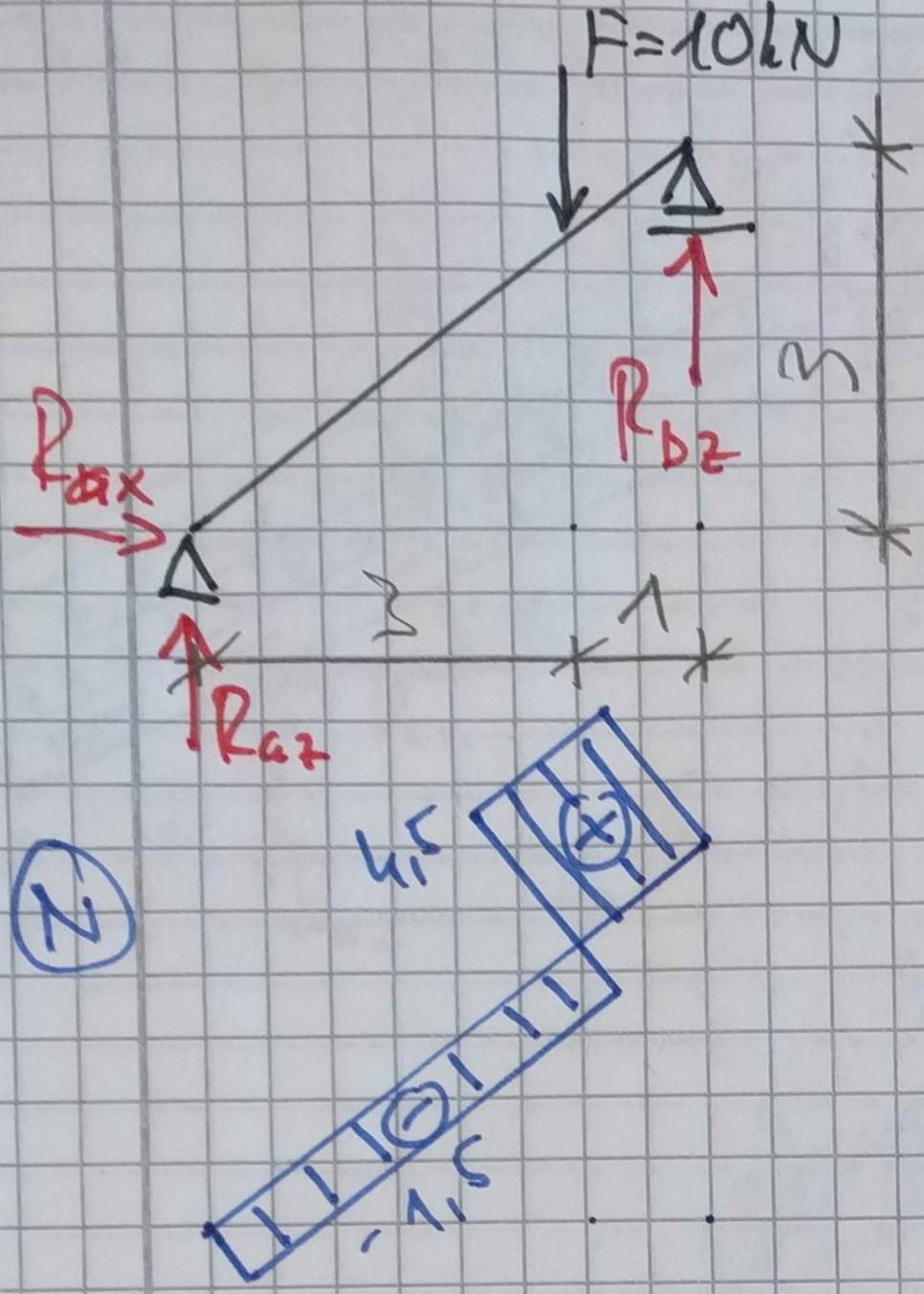
$\alpha = \operatorname{arctg}\left(\frac{3}{4}\right) = 36,87°$

$\beta = 323,13°$

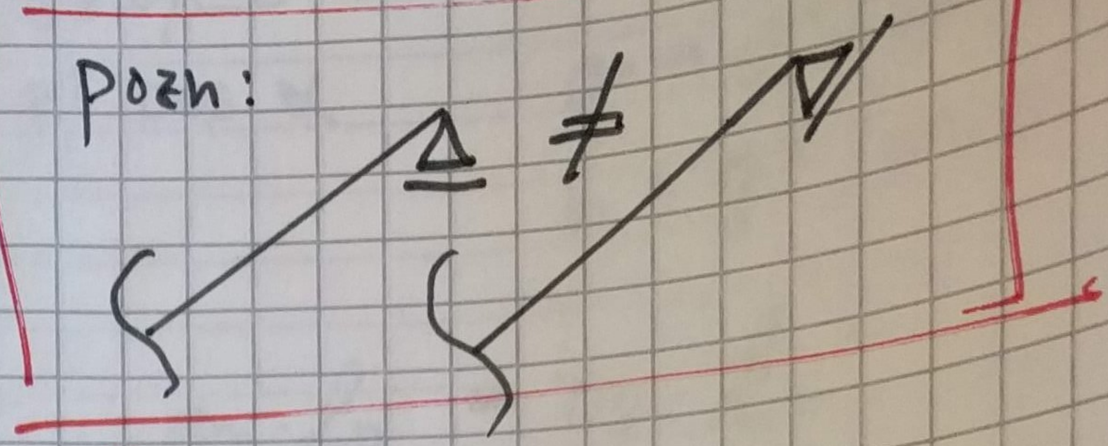
$N^* = N \cos\beta - V \sin\beta$

$V^* = N \sin\beta - V \cos\beta$





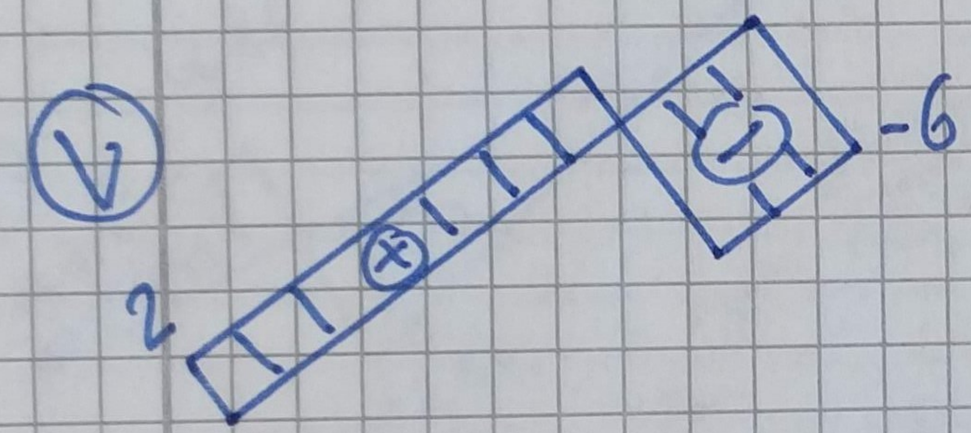
Pozn:

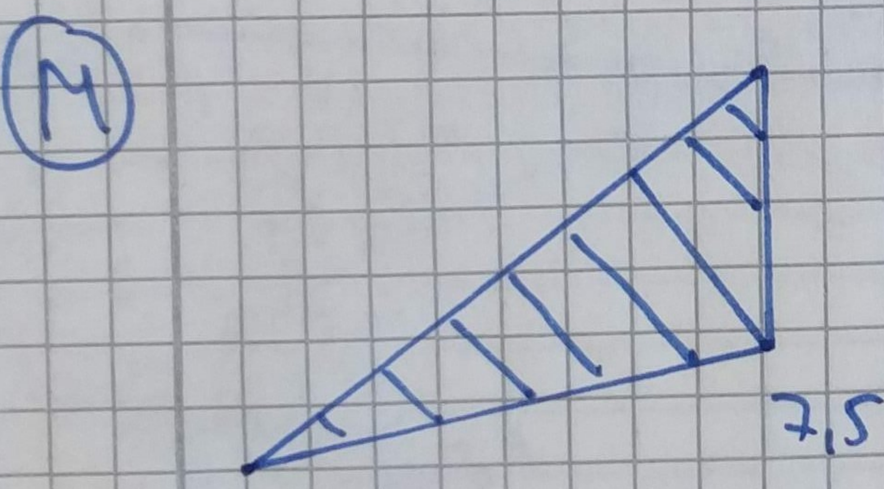


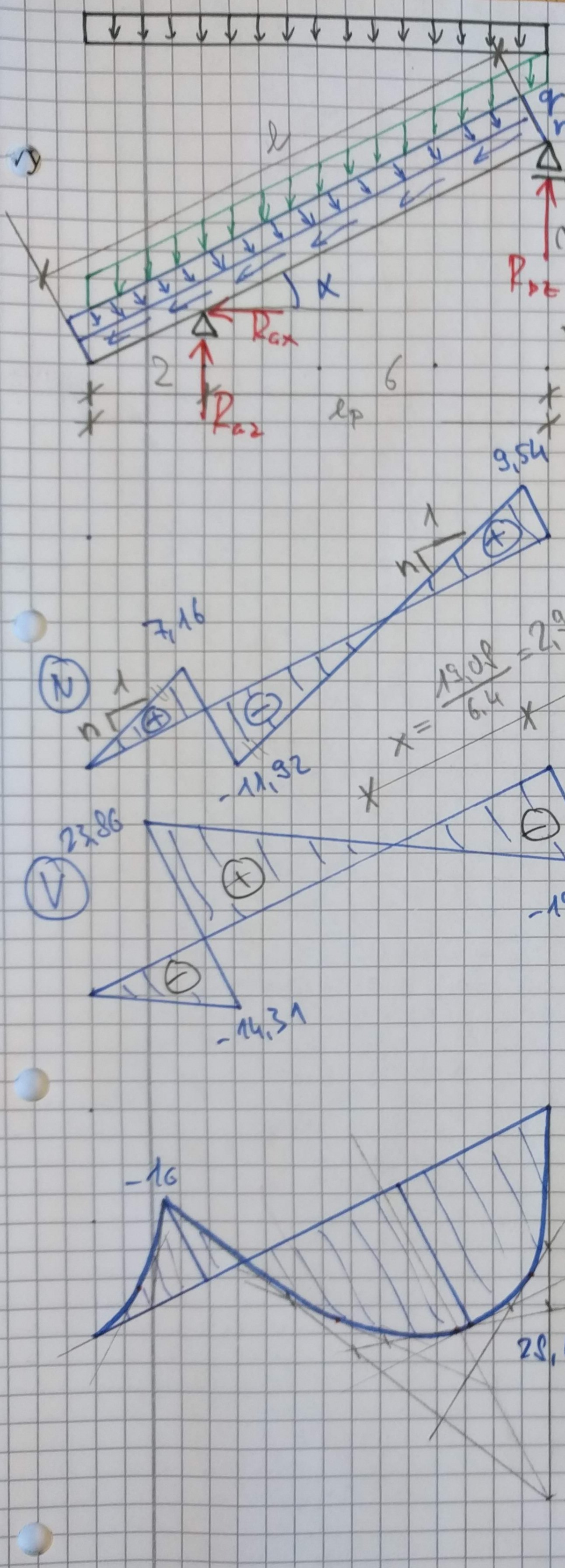
$R_{ax} = 0$

$R_{az} = 2,5\ kN\ (\uparrow)$

$R_{dz} = 7,5\ kN$







$q^p = 8\,kN/m$

$q_l = q^p \cos\alpha$

$q = q_l \cos\alpha$

$n = q_l \sin\alpha$

$q_p \cdot l_p = q_l \cdot l$

$l = \sqrt{8^2 + 4^2} = 8,944\,m$

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

$\sum M_{ia} = 0 \circlearrowleft$

$-(q_p \cdot l) \cdot 2 + R_{bz} \cdot 6 = 0$

$R_{bz} = 21,33\,kN\,(\uparrow)$

$\sum M_{ib} = 0 \circlearrowright$

$(q_p \cdot l) \cdot 4 + R_{ax} \cdot 3 - R_{az} \cdot 6 = 0$

$R_{az} = 42,67\,kN\,(\uparrow)$

$\alpha = \operatorname{arctg}\left(\frac{3}{6}\right) = 26,565°$

$q = q^p \cdot \cos^2\alpha = 6,4\,kN/m$

$n = q^p \cdot \cos\alpha \cdot \sin\alpha = 3,2\,kN/m$

$x_p = x \cdot \cos\alpha = 2,6663\,m$

$M_x = R_{Dz} \cdot x_p - \frac{q_p \cdot x_p^2}{2}$

$M_x = 28,44\,kN\,m$