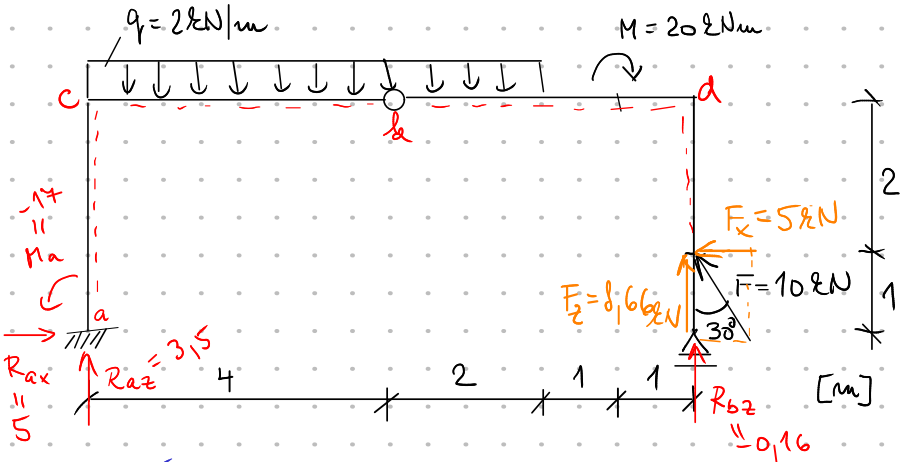


$\Sigma M^P_{zi} = 0 : \oplus\circlearrowleft$

$R_{bz} \cdot 4 + F_z \cdot 4 - F_x \cdot 2 - M - q \cdot 2 \cdot 1 = 0$

$R_{bz} = -0{,}16\ kN$

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

$M_a + R_{bz} \cdot 8 + F_z \cdot 8 + F_x \cdot 1 - M - q \cdot 6 \cdot 3 = 0$

$M_a = -17\ kNm$

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

$R_{ax} - F_x = 0 \Rightarrow R_{ax} = 5\ kN$

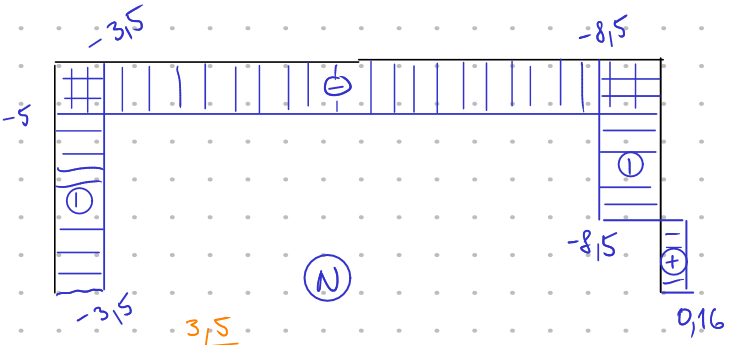
$\Sigma M^L_{zi} = 0 : \oplus\circlearrowright$

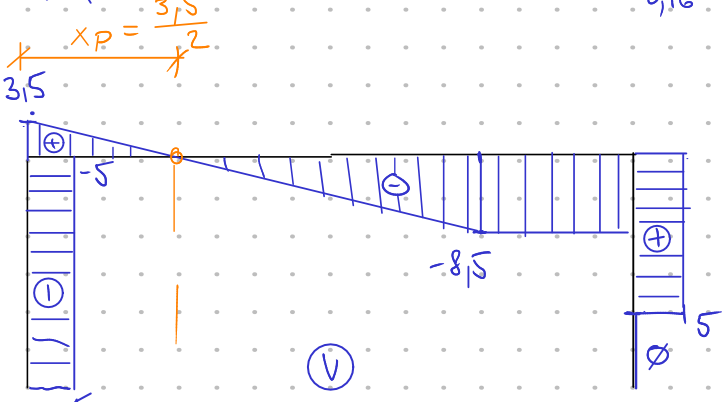
$R_{az} \cdot 4 - M_a - R_{ax} \cdot 3 - q \cdot 4 \cdot 2 = 0$

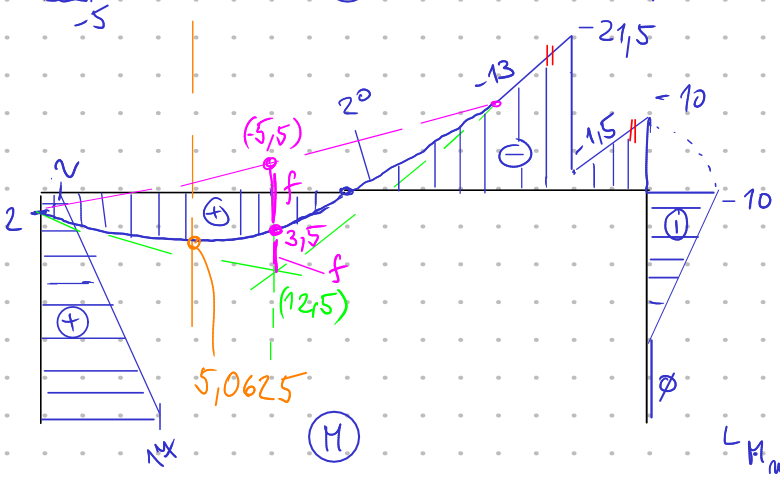
$R_{az} = 3{,}5\ kN$

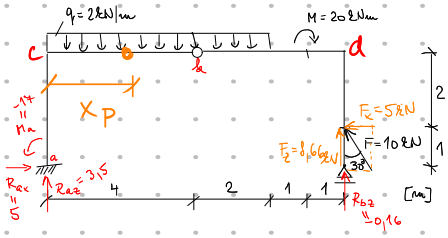
$\Sigma F_{zi} = 0 : \oplus\uparrow$

$R_{az} + R_{bz} + F_z - q \cdot 6 = 0$ ✓









$M_{max} = M_{pred} \overset{zleva}{\oplus} \int_{x_p} V\,dx =$

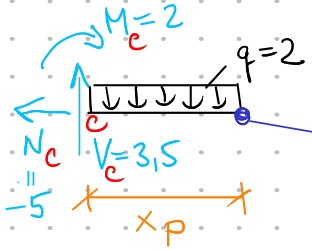
$= 2 + \frac{1}{2} 3{,}5 \cdot x_p = 5{,}0625\ kNm$

$f = \frac{1}{8} q l^2 = \frac{1}{8} 2 \cdot 6^2 = 9$

$(-5{,}5 + 2 \cdot f = 12{,}5\ V)$

$L M_{max} = R_{az} \cdot x_p - M_a - R_{ax} \cdot 3 - q \cdot x_p \cdot \frac{x_p}{2} =$

$5{,}0625\ kNm$ ✓



$L M_{max} = V_c \cdot x_p + M_c - q \cdot x_p \frac{x_p}{2} = 5{,}0625\ kNm$

rovnica paraboly:

$M_c + V_c \cdot x - q \cdot x \cdot \frac{x}{2} = M(x)$

$2 + 3{,}5 \cdot x - x^2 = M(x)$

$M(x=0) = 2\ kNm$ ✓ $\quad M(x=3) = 3{,}5\ kNm$ ✓

$M(x=x_p) = 5{,}0625\ kNm$ ✓ $\quad M(x=6) = -13\ kNm$ ✓