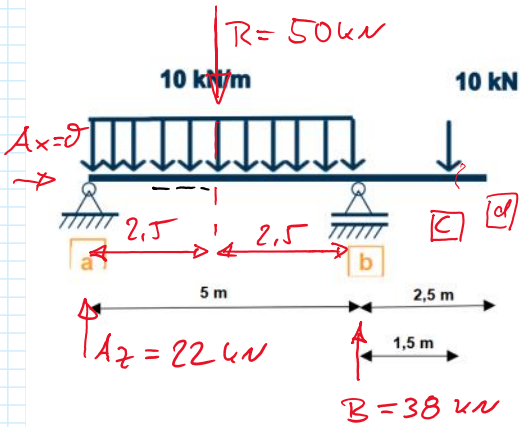
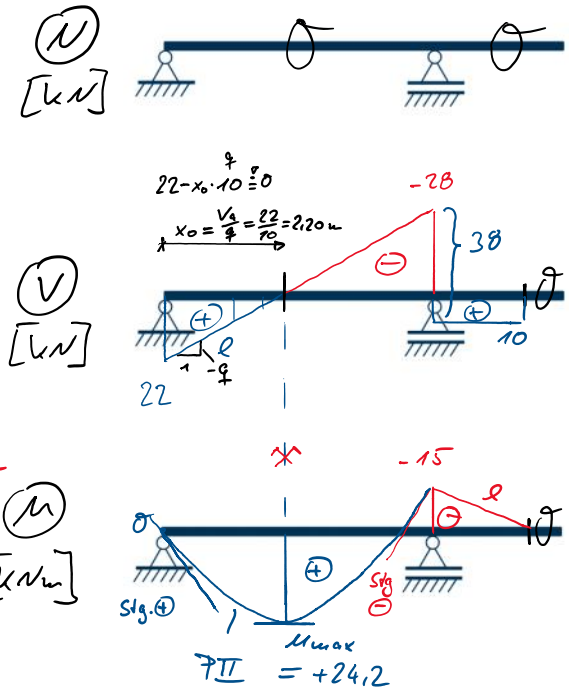




$M(x) = V'(x)$

$\Sigma F_x \rightarrow A_x = 0$

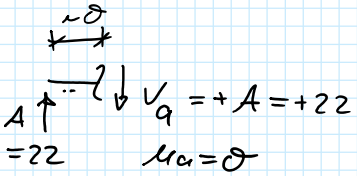
$\curvearrowleft \Sigma M_a = 0 = -50 \cdot 2{,}5 + B \cdot 5 - 10 \cdot 6{,}5$

$\rightarrow B = \frac{190}{5} = 38$ kN

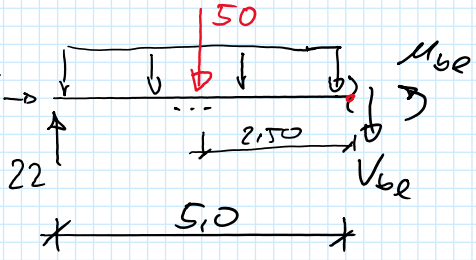
$\Sigma F_z = 0 = -A_z - 38 + 50 + 10$

$\rightarrow A_z = 22$ kN

a



b ℓ



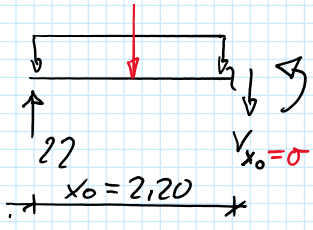
$\downarrow F_z = 0 = -22 + 50 + V_{b\ell} \rightarrow V_{b\ell} = -28$

$\curvearrowleft \Sigma M = 0 = -22 \cdot 5 + 50 \cdot 2{,}5 + M_{b\ell}$ (kN, m, kN, m, kNm)

$\rightarrow M_{b\ell} = -15{,}0$ kNm

M_{max}:

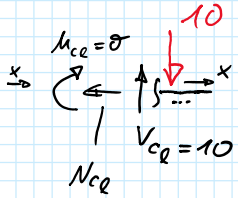
$R = 2{,}2 \cdot 10 = 22$ kN



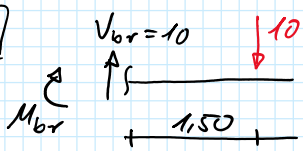
$\curvearrowleft \Sigma M = 0 = -22 \cdot 2{,}20 + 22 \cdot \frac{2{,}20}{2} + M_{max}$

$\rightarrow M_{max} = 24{,}2$ kNm

c ℓ



b r



$\curvearrowleft \Sigma M = 0 = -10 \cdot 1{,}5 - M_{br} \rightarrow M_{br} = -15$ kNm

M_{6r} $+$ 1,50 $+$

$\curvearrowleft \sum M_i = 0 = -10 \cdot 1{,}5 - M_{6r} \rightarrow M_{6r} = -15\ kNm$

Schnittkräfte | Ermittlung mit Tabellenwerken