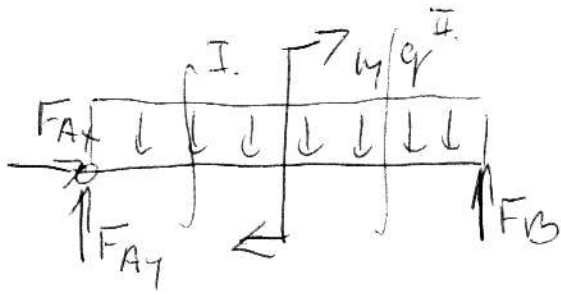


Prüfung: Umkehrprüfung
VVÜ.



$$\sum F_x: F_{Ax} = 0$$

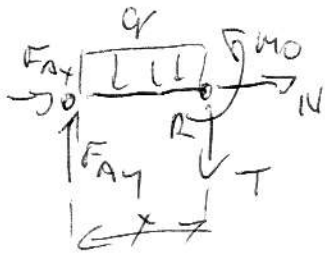
$$\sum F_y: F_{Ay} + F_B - q \cdot 35 = 0$$

$$\sum M_A: F_B \cdot 35 - M - q \cdot \frac{35^2}{2} = 0$$

$$F_B = \frac{M + q \cdot \frac{35^2}{2}}{35}$$

$$= \frac{200 + 10 \cdot \frac{35^2}{2}}{35} = \underline{\underline{180,7 \text{ N}}}$$

I. $0 \leq x < 15$



$$N = -F_{Ax} = 0$$

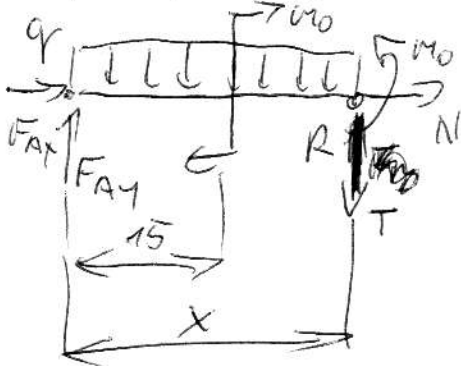
$$T + q \cdot x - F_{Ay} = 0$$

$$T = F_{Ay} - q \cdot x \quad F_{Ay} = q \cdot 35 - F_B = 350 - 180,7 = \underline{\underline{169,3 \text{ N}}}$$

$$M_0 + q \cdot \frac{x^2}{2} - F_{Ay} \cdot x = 0$$

$$M_0 = F_{Ay} \cdot x - q \cdot \frac{x^2}{2}$$

II. $15 \leq x \leq 35$



$$N = -F_{Ax} = 0$$

$$T = F_{Ay} - q \cdot x$$

$$M_0 = F_{Ay} \cdot x - q \cdot \frac{x^2}{2} + M$$

Prüfung VÜ via Sourdon MS EXCEL