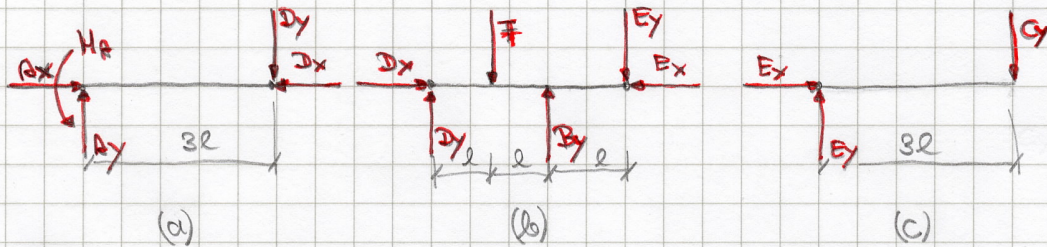


Aufgabe 9:



Gleichung:

$$(a) \quad \rightarrow: A_x - D_x = 0 \quad (1)$$

$$\uparrow: A_y - D_y = 0 \quad (2)$$

$$\circlearrowleft: H_a - D_y \cdot 3l = 0 \quad (3)$$

$$(b) \quad \rightarrow: D_x - E_x = 0 \quad (4)$$

$$\uparrow: D_y - F + B_y - E_y = 0 \quad (5)$$

$$\circlearrowleft: -F \cdot l + B_y \cdot 2l - E_y \cdot 3l = 0 \quad (6)$$

$$(c) \quad \rightarrow: E_x = 0 \quad (7)$$

$$\uparrow: E_y - G = 0 \quad (8) \quad \rightarrow \quad E_y = 0$$

$$\circlearrowleft: -G \cdot 3l = 0 \quad (9) \quad \rightarrow \quad \underline{\underline{G = 0}}$$

$$\text{aus (4): } \underline{\underline{D_x = E_x = 0}}$$

$$\text{aus (1): } \underline{\underline{A_x = D_x = 0}}$$

$$\text{aus (6): } \underline{\underline{B_y = \frac{1}{2}(F + 3E_y) = \frac{F}{2} = 7.5 \text{ kN}}}$$

$$\text{aus (5): } \underline{\underline{D_y = F - B_y + E_y = 7.5 \text{ kN}}}$$

$$\text{aus (3): } \underline{\underline{H_a = 3D_y l = 45 \text{ kNm}}}$$

$$\text{aus (2): } \underline{\underline{A_y = D_y = 7.5 \text{ kN}}}$$