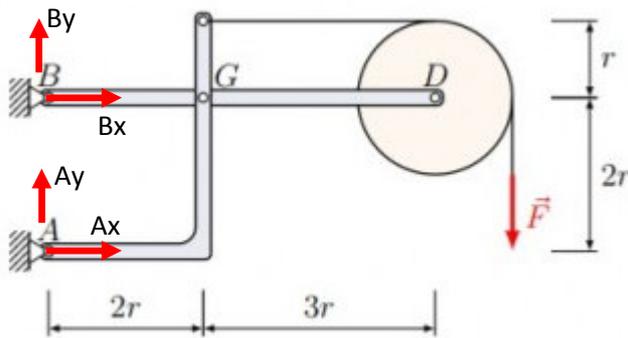


Gesamtsystem:



Zuerst im Gesamtsystem einige Auflagekräfte zu berechnen:

Summe der Momente um A gleich Null:

$$\sum M_A = -F \cdot 6r - B_x \cdot 2r = 0$$

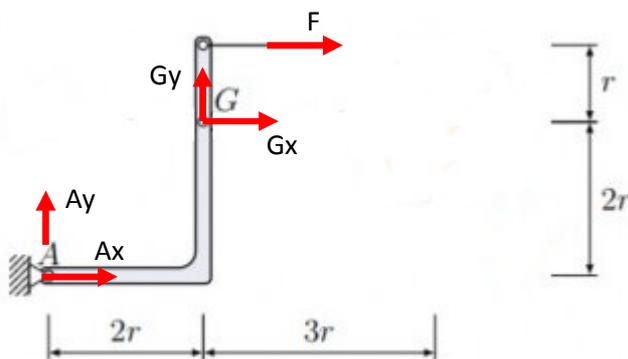
Lösungshilfe: $A_x = 3F$, $A_y = \frac{5}{2}F$, $B_x = -3F$, $B_y = -\frac{3}{2}F$

$$B_x = -3F$$

$$\sum M_B = -F \cdot 6r + A_x \cdot 2r = 0$$

$$A_x = 3F$$

Teilsystem 1:



$$\sum M_G = -F \cdot r - A_y \cdot 2r + A_x \cdot 2r = -F \cdot r - A_y \cdot 2r + 3F \cdot 2r = 0$$

$$A_y = \frac{5}{2}F$$

$$\sum K_y = A_y + G_y = \frac{5}{2}F + G_y = 0$$

Lösungshilfe: $A_x = 3F$, $A_y = \frac{5}{2}F$, $B_x = -3F$, $B_y = -\frac{3}{2}F$

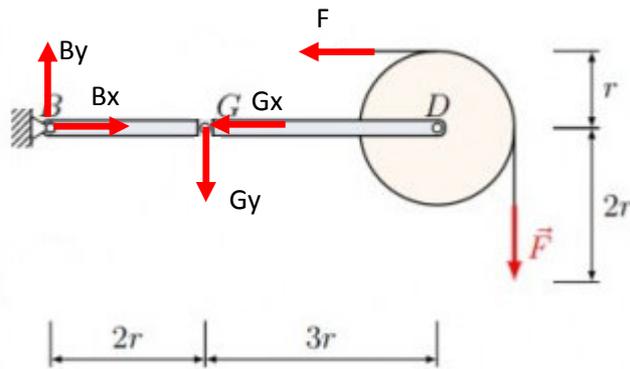
$$G_y = -\frac{5}{2}F$$

$$\sum K_x = B_x - G_x - F = -3F - G_x - F = 0$$

$$G_x = 4F$$

Lösungshilfe: $A_x = 3F$, $A_y = \frac{5}{2}F$, $B_x = -3F$, $B_y = -\frac{3}{2}F$

Teilsystem 2:



$$\sum K_y = B_y - G_y - F = B_y + \frac{5}{2}F - F = 0$$

$$B_y = -\frac{3}{2}F$$

Lösungshilfe: $A_x = 3F$, $A_y = \frac{5}{2}F$, $B_x = -3F$, $B_y = -\frac{3}{2}F$