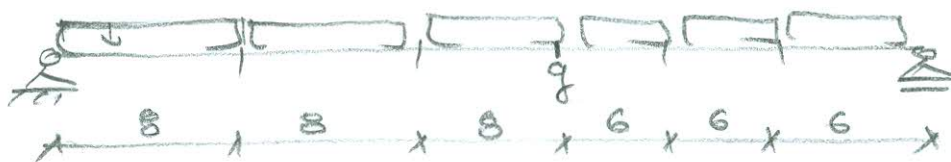


$$P = 5 \text{ kN}$$



$$\begin{aligned} M_{m0} &= M_{m0} - H'(y_m + d) \cos \alpha_0 + S_m \cdot d \cdot \cos \alpha_m \\ &= M_{m0} - H y_m + H d + H \cdot d \\ &= M_{m0} - H y_m \end{aligned}$$

$$H^{(A)} = \frac{L_1}{5} = \frac{24}{\frac{44}{7}} = \frac{168}{44} = 3,81$$

$$H^{(B)} = \frac{L_2}{5} = \frac{16}{\frac{44}{7}} = \frac{112}{44} = 2,54$$

Deo a do 1

$$y_1 = 6 - 8 \cdot \tan \alpha_0 = 6 - 8 \cdot \frac{1}{14} = \frac{38}{7}$$

$$M_{m1} = M_{m1,0} - H \cdot y_1$$

$$F^+ = \frac{3,81 \cdot 14,27}{2} = 25,081$$

$$F^- = \frac{5,95 \cdot 27,72}{2} = 75,6265$$

$$M_{1,0} = 8 \quad -\frac{38}{7} H^{(+)} = -20,72$$

$$M_{1,0} = 34 \quad -\frac{38}{7} H^{(B)} = -15,54$$

Deo 1-2

$$y_2 = 6 + 2 - 16 \cdot \tan \alpha_0 = \frac{48}{7}$$

$$M_{2,0} = 16 \quad -\frac{48}{7} H^{(+)} = -26,18$$

$$M_{2,0} = 28 \quad -\frac{48}{7} H^{(B)} = 19,63$$

$$F^+ = \frac{2,142 \cdot 18,8571}{2} = 22,8571$$

$$F^- = \frac{4,36 \cdot 23,1429}{2} = 50,4936$$

Deo 2-3

$$y_3 = 8 - 24 \cdot \frac{1}{14} = \frac{44}{7}$$

$$M_{3,0} = 24 \quad -\frac{44}{7} H^{(+)} = -24$$

$$M_{3,0} = 18 \quad -\frac{44}{7} H^{(B)} = -18$$

$$F^+ = \frac{10,2857 \cdot 22}{2} = 113,1427$$

$$F^- = \frac{10,857 \cdot 20}{2} = 108,57$$