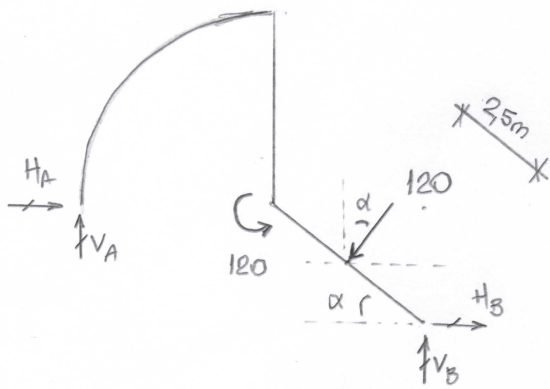
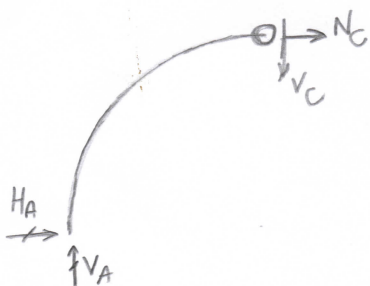


Calculo das reações de apoio:



$$\sin \alpha = 3/5; \cos \alpha = 4/5$$

Corte em C:



$$\sum F_H = 0: H_A + H_B - 120 \cdot \sin \alpha = 0 \Rightarrow H_A + H_B = 72$$

$$\sum F_V = 0: V_A + V_B - 120 \cdot \cos \alpha = 0 \Rightarrow V_A + V_B = 96$$

$$\sum M_B = 0: 120 \cdot 2,5 + 120 - V_A \cdot 9 - H_A \cdot 3 = 0$$

$$H_A + 3V_A = 140$$

no corte:

$$\sum M_C = 0: H_A \cdot 5 - V_A \cdot 5 = 0 \Rightarrow H_A = V_A$$

Substituindo:

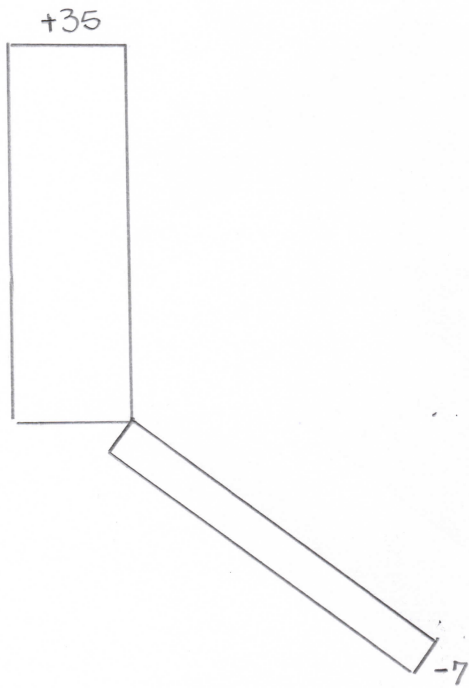
$$4V_A = 140 \Rightarrow \boxed{V_A = 35 \text{ kN}}$$

$$H_A = V_A \Rightarrow \boxed{H_A = 35 \text{ kN}}$$

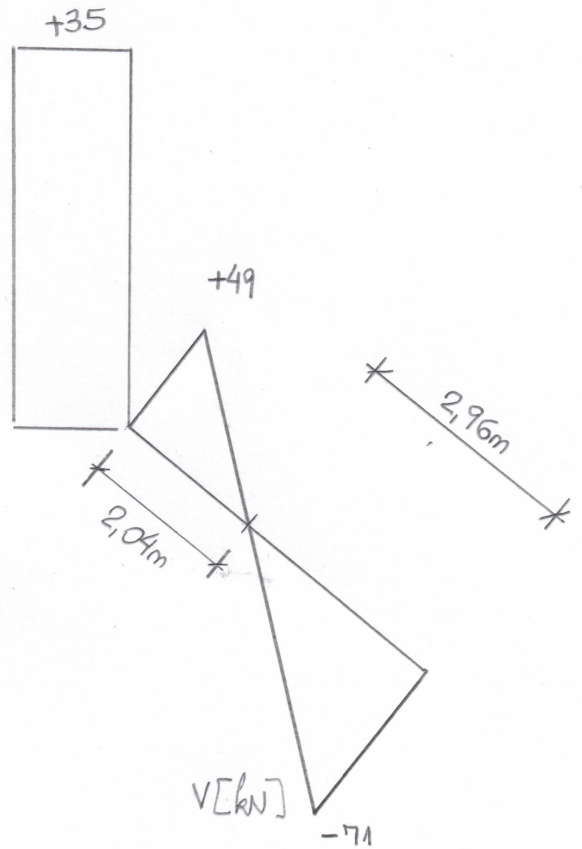
$$H_B = 72 - H_A \Rightarrow \boxed{H_B = 37 \text{ kN}}$$

$$V_B = 96 - V_A \Rightarrow \boxed{V_B = 61 \text{ kN}}$$

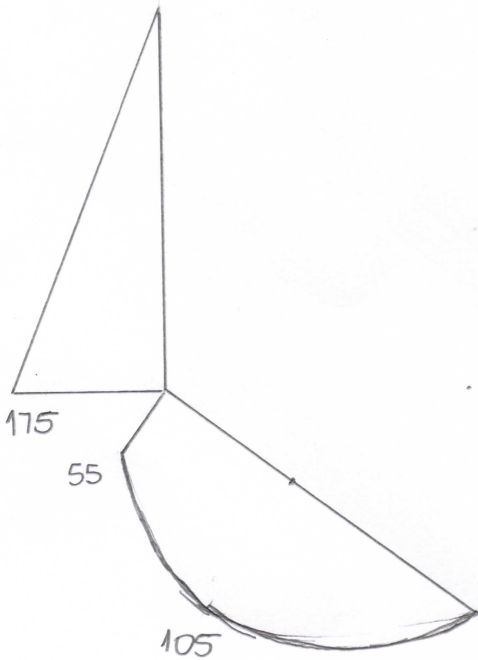
Diagramas (apenas trechos retos):



$N[kN]$

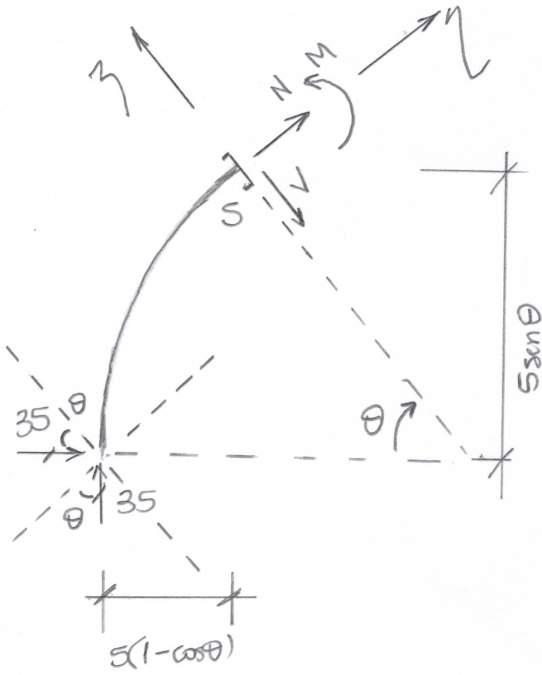


$V[kN]$



$M[kNm]$

Equações do trecho curvo:



$$\sum F_x = 0: N + 35 \sin \theta + 35 \cos \theta = 0$$

$$N = -35(\sin \theta + \cos \theta)$$

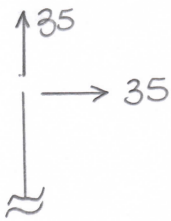
$$\sum F_y = 0: -V + 35 \sin \theta - 35 \cos \theta = 0$$

$$V = 35(\sin \theta - \cos \theta)$$

$$\sum M_S = 0: M + 35 \cdot 5 \cdot \sin \theta - 35 \cdot 5 \cdot (1 - \cos \theta) = 0$$

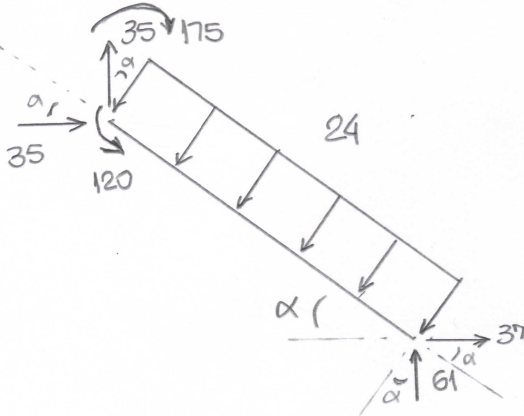
$$M = 175(1 - \cos \theta - \sin \theta)$$

Transporte para C:



* o momento resultante no transporte é zero
(de acordo com a articulação nesse ponto)

Transporte para D:



|||

