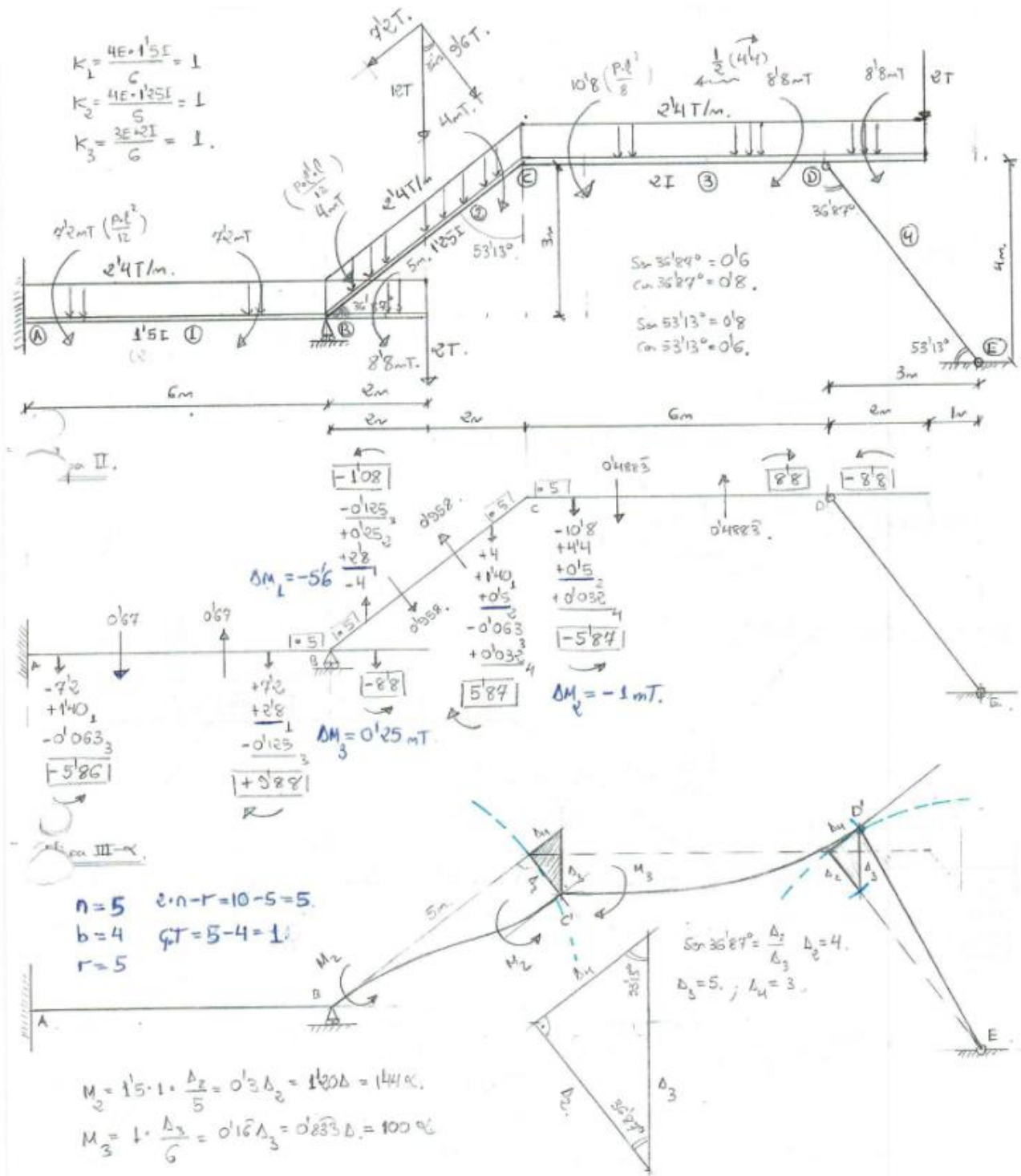
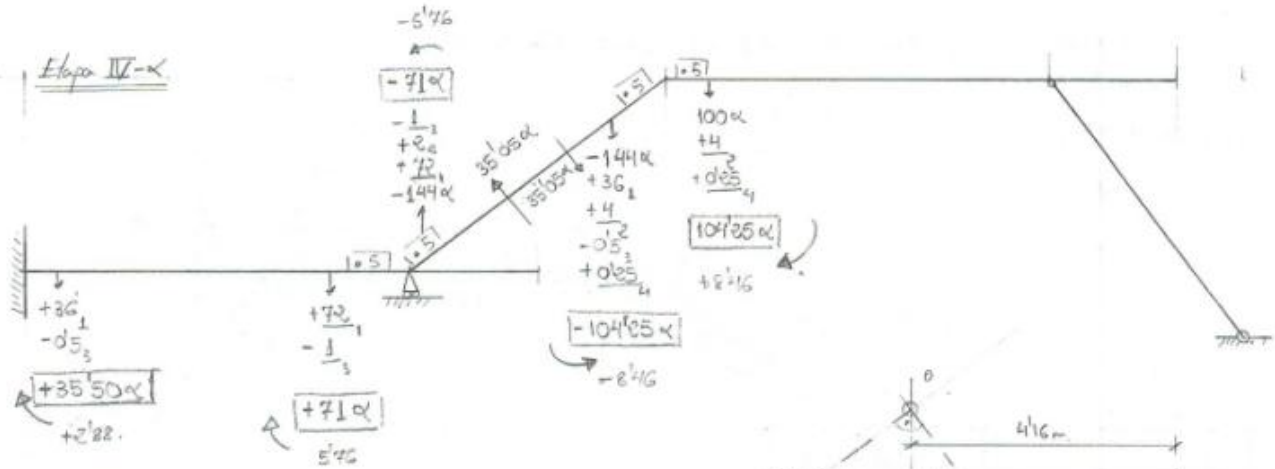


Estructuras de Nudos Rígidos – Método de Cross y Matricial:

Obtener los diagramas de esfuerzos de la estructura indicada.



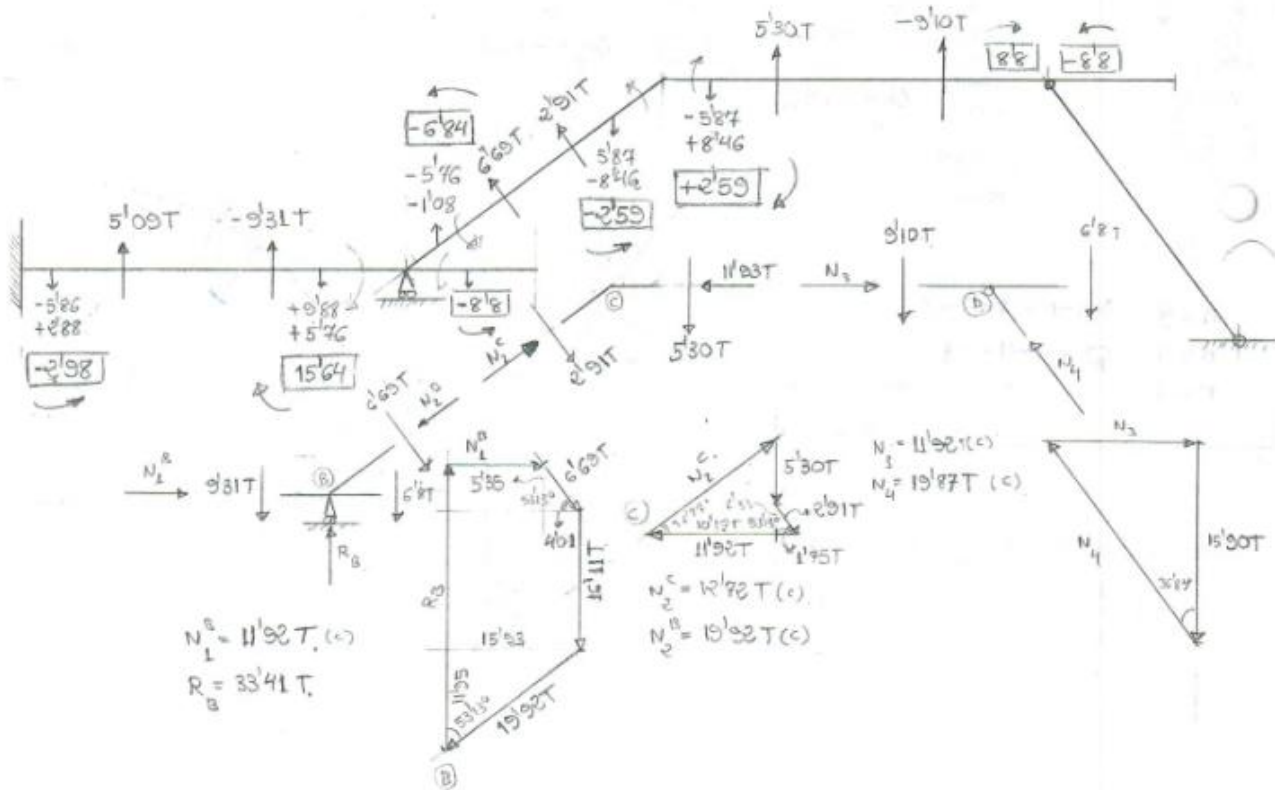


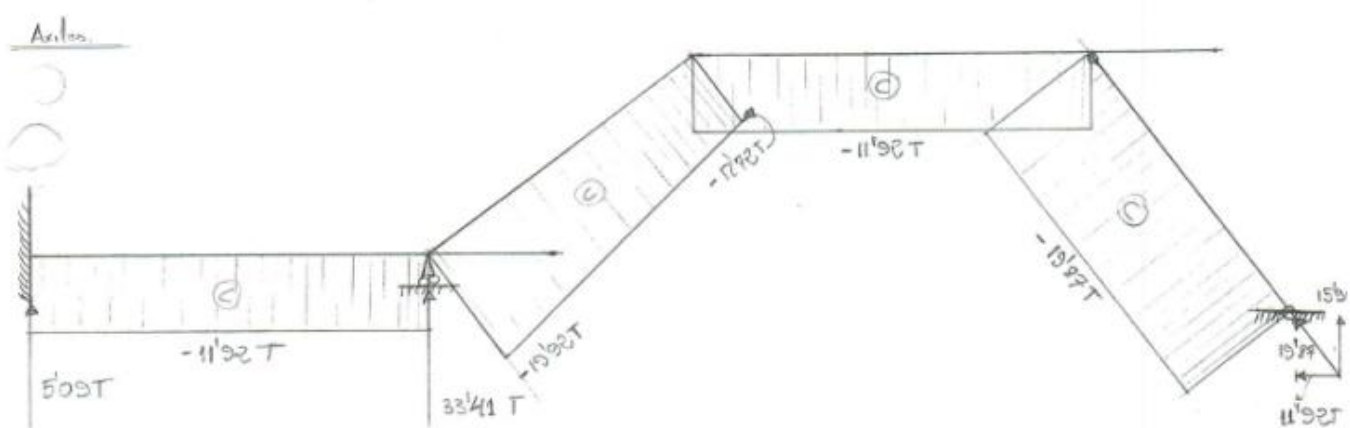
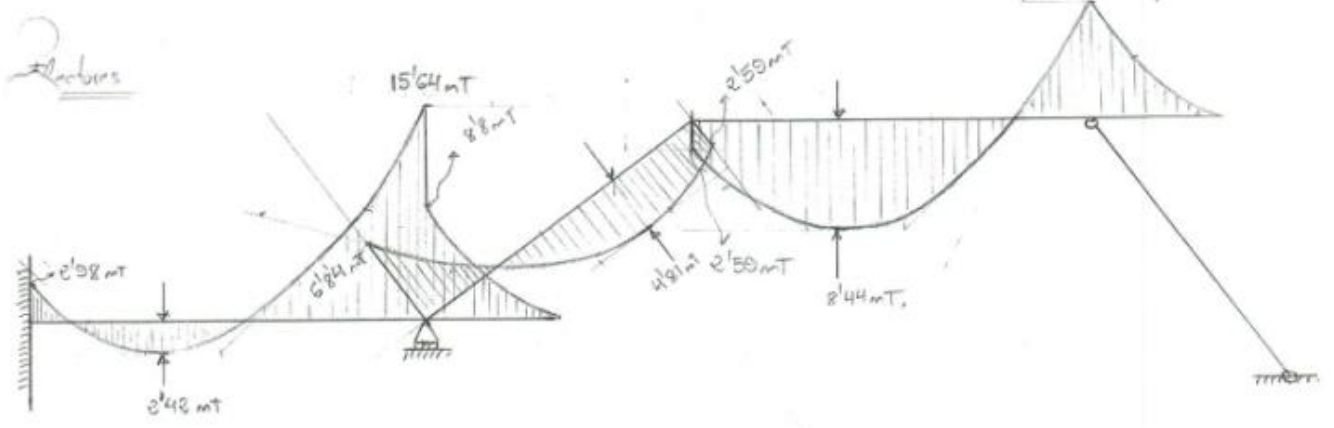
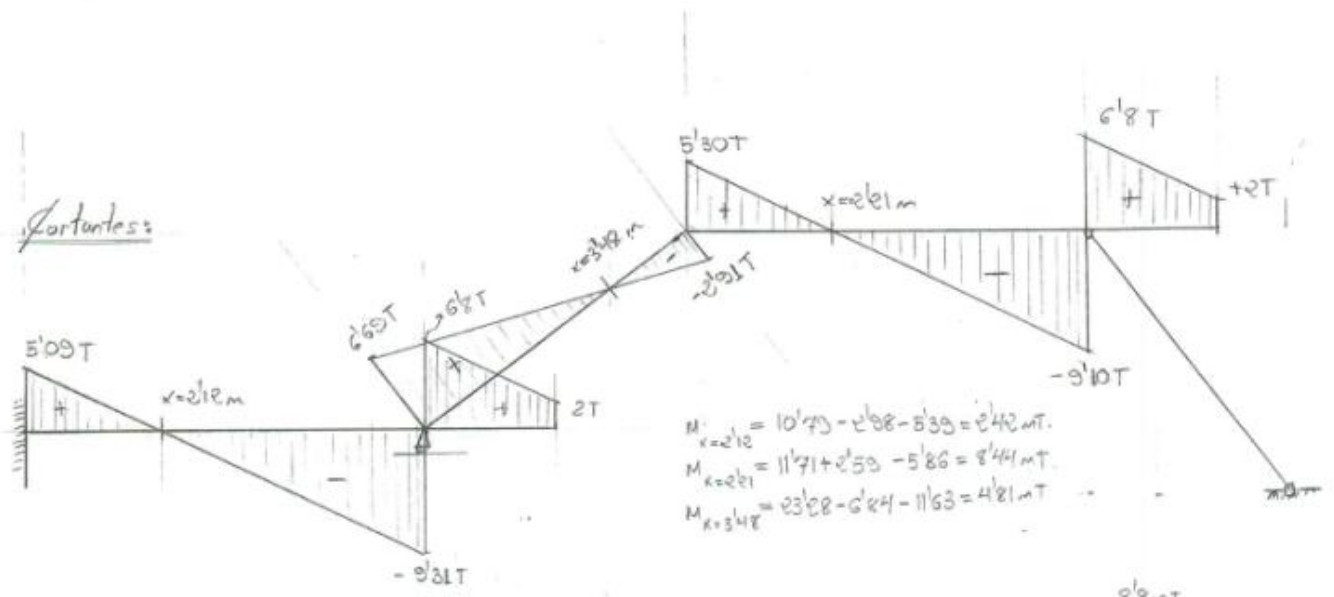
Etapas V- α .

$$\begin{aligned} \sum M_B = 0 &\Rightarrow -584 - 27638 + 30742 + 832 + \\ &+ 16224\alpha + 10425\alpha = 0, \\ -22116 + 27245\alpha &= 0, \\ \alpha &= 0.081162611. \end{aligned}$$



Normalas y Cortantes definitivas.





$\sum F_v = 0 \Rightarrow 2.12 + 12 + 2.12 = 54.40 \text{ T}$ $\sum \text{Reacciones Verticales} = 5.09 + 33.41 + 15.90 = 54.40$
 $\sum F_H = 0 \Rightarrow 11.92 - 11.92 = 0$