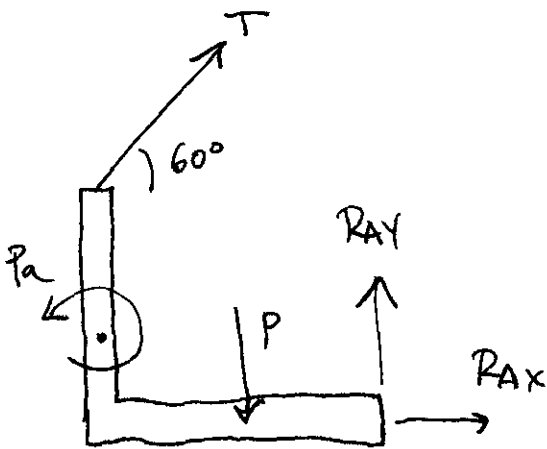
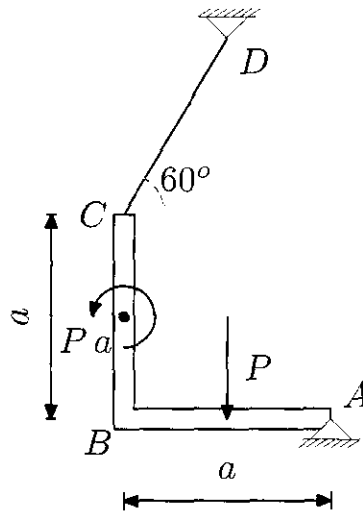


1.1 Calcula las reacciones en A, la tensión en el cable CD, y dibuja los diagramas de esfuerzos ( $N, T, M$ ) de la estructura de la figura.



$$0 = \sum F_x = R_{Ax} + T \frac{1}{2}$$

$$0 = \sum F_y = R_{Ay} + T \frac{\sqrt{3}}{2} - P$$

$$0 = \sum M_A = Pa + \frac{Pa}{2} - T \frac{\sqrt{3}}{2} a - \frac{T}{2} a = \frac{3}{2} Pa - \frac{1+\sqrt{3}}{2} Ta$$

$$\Rightarrow \boxed{T = \frac{3}{1+\sqrt{3}} P}$$

$$\rightarrow \boxed{\begin{aligned} R_{Ax} &= -\frac{3P}{2+2\sqrt{3}} \\ R_{Ay} &= \frac{2-\sqrt{3}}{2+2\sqrt{3}} P \end{aligned}}$$

