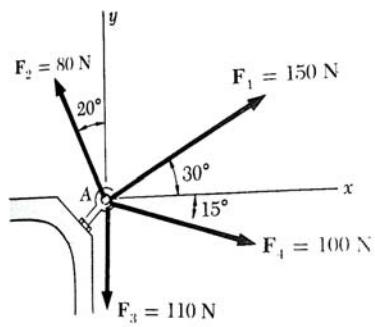


Problema Resuelto 2.3:



$$MF_1 := 150\text{N} \quad \alpha_1 := 30\text{deg} \quad F_1 := \begin{pmatrix} MF_1 \cdot \cos(\alpha_1) \\ MF_1 \cdot \sin(\alpha_1) \end{pmatrix} \quad F_1 = \begin{pmatrix} 129.904 \\ 75 \end{pmatrix} \text{N}$$

$$MF_2 := 80\text{N} \quad \alpha_2 := 20\text{deg} + \frac{\pi}{2} \quad F_2 := \begin{pmatrix} MF_2 \cdot \cos(\alpha_2) \\ MF_2 \cdot \sin(\alpha_2) \end{pmatrix} \quad F_2 = \begin{pmatrix} -27.362 \\ 75.175 \end{pmatrix} \text{N} \quad \alpha_2 = 110\text{-deg}$$

$$MF_3 := 110\text{N} \quad \alpha_3 := -\frac{\pi}{2} \quad F_3 := \begin{pmatrix} MF_3 \cdot \cos(\alpha_3) \\ MF_3 \cdot \sin(\alpha_3) \end{pmatrix} \quad F_3 = \begin{pmatrix} 0 \\ -110 \end{pmatrix} \text{N} \quad \alpha_3 = -90\text{-deg}$$

$$MF_4 := 100\text{N} \quad \alpha_4 := -15\text{deg} \quad F_4 := \begin{pmatrix} MF_4 \cdot \cos(\alpha_4) \\ MF_4 \cdot \sin(\alpha_4) \end{pmatrix} \quad F_4 = \begin{pmatrix} 96.593 \\ -25.882 \end{pmatrix} \text{N}$$

$$\underline{\underline{R}} := F_1 + F_2 + F_3 + F_4 \quad R = \begin{pmatrix} 199.13 \\ 14.29 \end{pmatrix} \text{N}$$