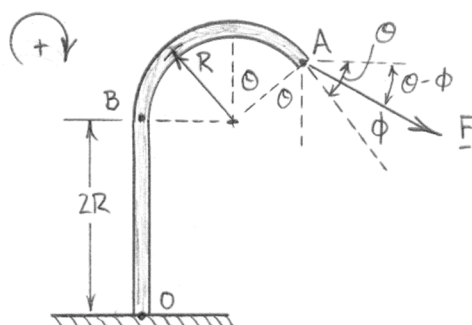


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$$\begin{cases} M_B = F \sin(\theta - \phi)(R + R \sin \theta) + F \cos(\theta - \phi)(R \cos \theta) \\ \underline{M_B = FR [\cos \phi + \sin(\theta - \phi)]} \end{cases}$$

$$\begin{cases} M_O = F \sin(\theta - \phi)(R + R \sin \theta) + F \cos(\theta - \phi)(2R + R \cos \theta) \\ \underline{M_O = FR [2 \cos(\theta - \phi) + \cos \phi + \sin(\theta - \phi)]} \end{cases}$$

If $F = 750 \text{ N}$, $R = 2.4 \text{ m}$, $\theta = 30^\circ$, and $\phi = 15^\circ \dots$

$$\begin{cases} \underline{M_B = 2200 \text{ N}\cdot\text{m} \text{ CW}} \\ \underline{M_O = 5680 \text{ N}\cdot\text{m} \text{ CW}} \end{cases}$$