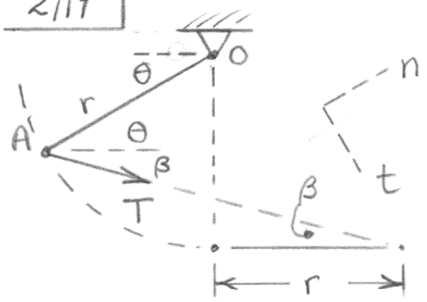
2/19



From solution to previous problem:

$$\beta = \tan^{-1}\left[\frac{1-\sin\theta}{1+\cos\theta}\right]$$

$$\begin{cases} T_n = T\cos(\theta+\beta) \\ T_t = T\sin(\theta+\beta) \end{cases}$$

For $T = 100$ N and $\theta = 35°$:

$\beta = 13.19°$

$$\begin{cases} T_n = 66.7 \text{ N} \\ T_t = 74.5 \text{ N} \end{cases}$$