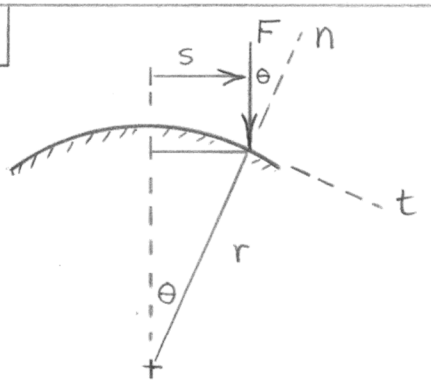
2/8



$$\theta = \sin^{-1}\left(\frac{s}{r}\right)$$

$$F_t = F\sin\theta = F\sin\left[\sin^{-1}\left(\frac{s}{r}\right)\right] = \underline{\frac{Fs}{r}}$$

$$F_n = -F\cos\theta = -F\cos\left[\sin^{-1}\left(\frac{s}{r}\right)\right]$$

$$= \underline{-\frac{F\sqrt{r^2-s^2}}{r}}$$