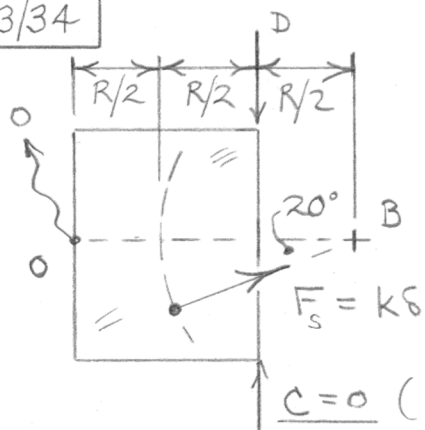


3/34



$$R = 0.025 \text{ m}$$

$$\begin{aligned} F_s &= k\delta \\ &= k \left[R - \frac{R}{3} \right] \\ &= 1600 \left(\frac{2}{3} \cdot 0.025 \right) \\ &= 26.7 \text{ N} \end{aligned}$$

$$\begin{aligned} \sum M_O = 0 : & \quad 26.7 \sin 20^\circ \left(\frac{3}{2} \cdot 0.025 \right) - D(0.025) \\ & \quad = 0 \end{aligned}$$

$$\underline{D = 13.68 \text{ N}}$$

WILEY