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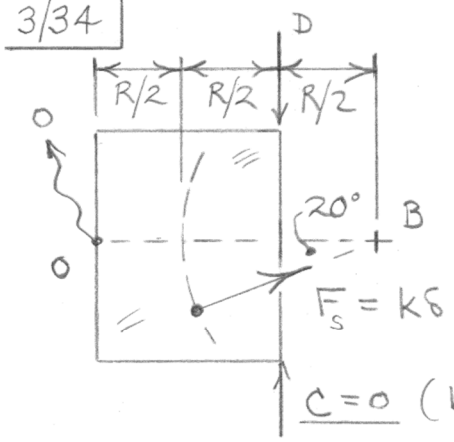

$R = 0.025$ m

$F_s = k\delta$

$= k\left[R - \frac{R}{3}\right]$

$= 1600\left(\frac{2}{3} \cdot 0.025\right)$

$= 26.7$ N

$C = 0$ (by inspection)

$\curvearrowleft \Sigma M_O = 0$: $26.7 \sin 20° \left(\frac{3}{2} \cdot 0.025\right) - D(0.025) = 0$

$D = 13.68$ N