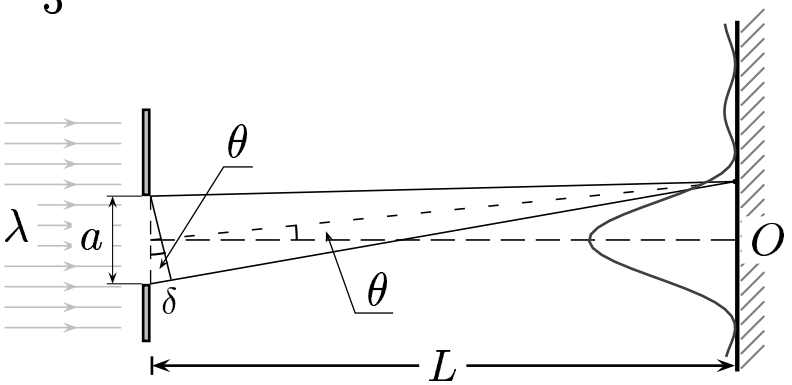
Given $\delta = \dfrac{\lambda}{3}$.



Estimate $\dfrac{I}{I_0}$.

A) $\dfrac{I}{I_0} \approx 1.$

B) $\dfrac{I}{I_0} \approx \dfrac{3}{4}.$

C) $\dfrac{I}{I_0} \approx \dfrac{1}{2}.$

D) $\dfrac{I}{I_0} \approx \dfrac{1}{3}.$

$$\frac{I(\beta)}{I(0^\circ)} = \frac{\sin^2\left(\dfrac{\beta}{2}\right)}{\left(\dfrac{\beta}{2}\right)^2},\ \beta = k\,\delta.$$

For $\delta = \dfrac{\lambda}{3}$, $\beta = \dfrac{2\,\pi}{3}$.

$$\frac{I(\beta)}{I(0^\circ)} = \frac{\sin^2\left(\dfrac{\beta}{2}\right)}{\left(\dfrac{\beta}{2}\right)^2} = \frac{\left(\dfrac{\sqrt{3}}{2}\right)^2}{\left(\dfrac{\pi}{3}\right)^2} \approx \frac{3}{4}.$$

Answer **B**.