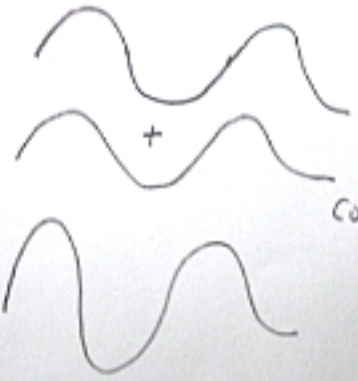
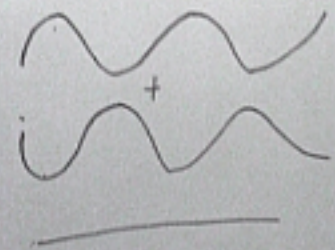
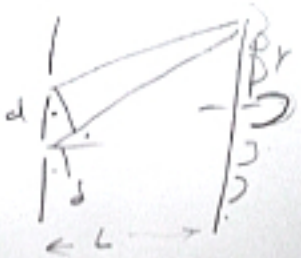
250







$$\tan\theta = \frac{Y}{L} \sim \sin\theta$$

$$\delta = d\sin\theta \approx \frac{Yd}{L}$$

Const. $\delta = m\lambda$, $m = 0, \pm 1, \ldots$

$$m\lambda = \frac{Y_m}{L} d \Rightarrow Y_m = \frac{m\lambda L}{d}$$

$$\Delta Y = \frac{\lambda L}{d} \Rightarrow \lambda = \frac{\Delta Y d}{L}$$

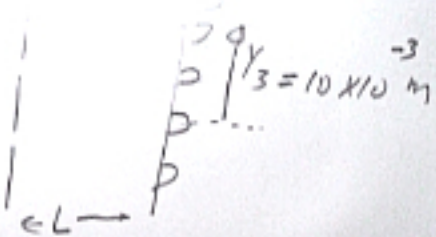
$\lambda = 600\,nm$

$d \left| \begin{array}{l} \\ \\ \end{array} \right. \begin{array}{l} \cdot 2\times10^{-3}\ m \\ \hline L = 1\,0 \end{array} \left| \begin{array}{l} \\ \\ \end{array} \right.$

$$Y_m = \frac{m\lambda L}{d}$$

$$\Delta Y_m = \frac{\lambda L}{d} = \frac{600\times10^{-9}\times1\,0}{\cdot2\times10^{-3}\,n}$$

$$= 3\times10^{-2}\,m$$



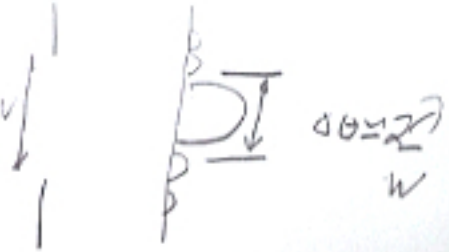
$$\delta = m\lambda$$

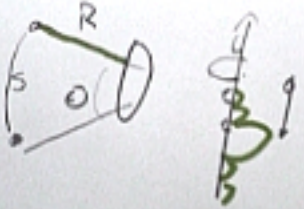
$$Y_m = \frac{m\lambda L}{d}$$

$$\lambda_m = \frac{Y_m}{L} d \cdot \frac{1}{m}$$

$$= \frac{10 \times 10^{-3} \cdot .15 \times 10^{-3}}{3 \cdot 1}$$

$$= 500\text{nm}$$





$S = R\Delta\theta$

$\Delta\theta = \frac{S}{R} = 1.22\frac{\lambda}{w}$

ϕ

S

Const:

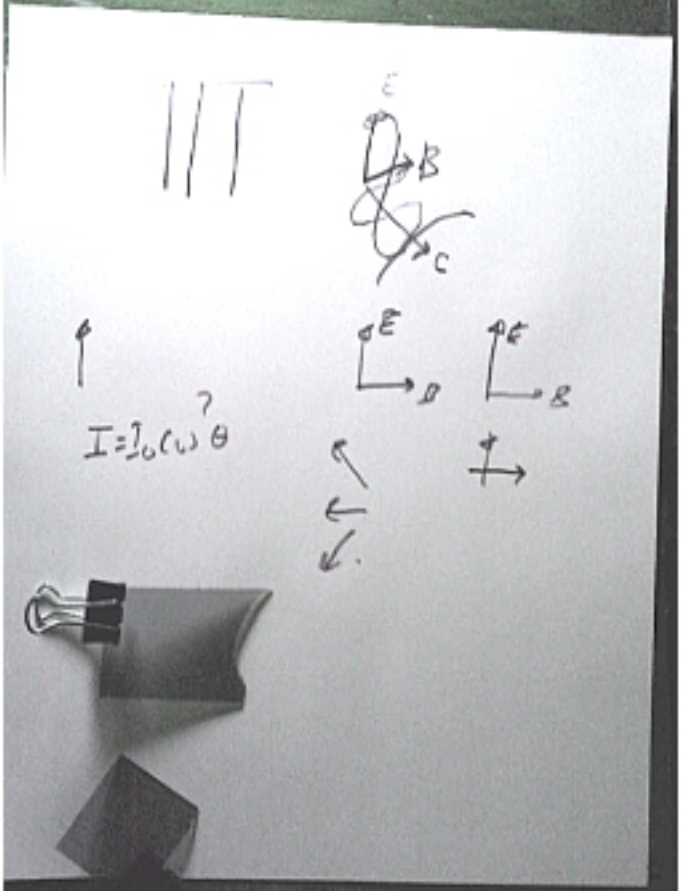
$\delta = m\lambda = d\sin\theta$

$m = 0, \pm 1, \ldots$

$\sin\theta_m = \frac{m\lambda}{d}$

$m' = \frac{d}{\lambda}$

$m < m'$ But Integer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I=I0(1)?θ