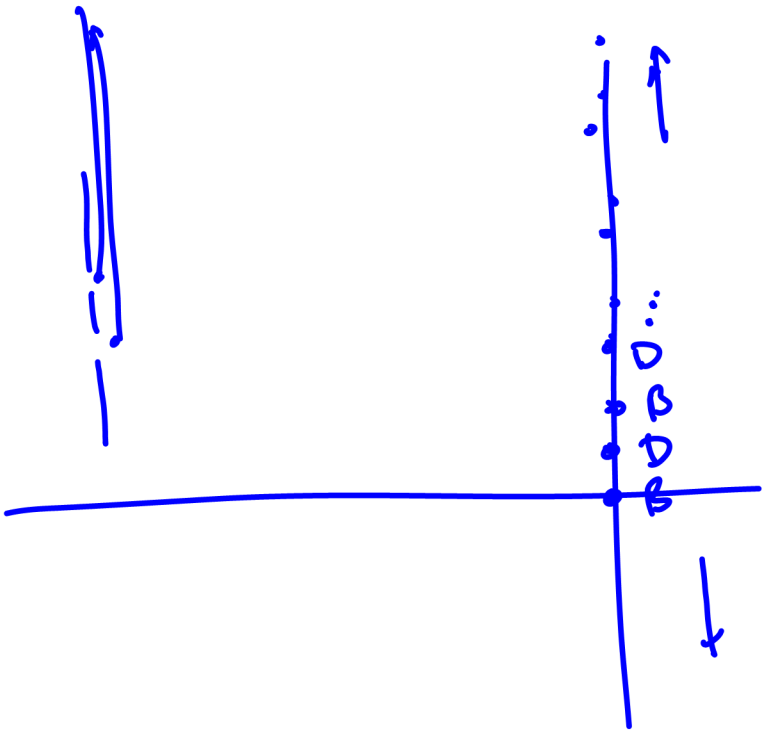
$\Gamma = 0, \lambda, 2\lambda, \ldots$ Constructive interference

$\Gamma = \frac{\lambda}{2}, \frac{3\lambda}{2}, \frac{5\lambda}{2}, \ldots$ destructive interference

Constructive maxima – $\Gamma = n\lambda$ $n = 0, 1, 2 \ldots$

destructive minima – $\Gamma = (n + \frac{1}{2})\lambda$ $n = 0, 1, 2 \ldots$

1. What is the path difference?
2. How is that path difference related to the wavelength?



$n\lambda = d \sin\theta \leq d$

$\sin\theta \leq 1$