

I10WEDGES

Fringes of a wedge given by y.

The distance is given by yy

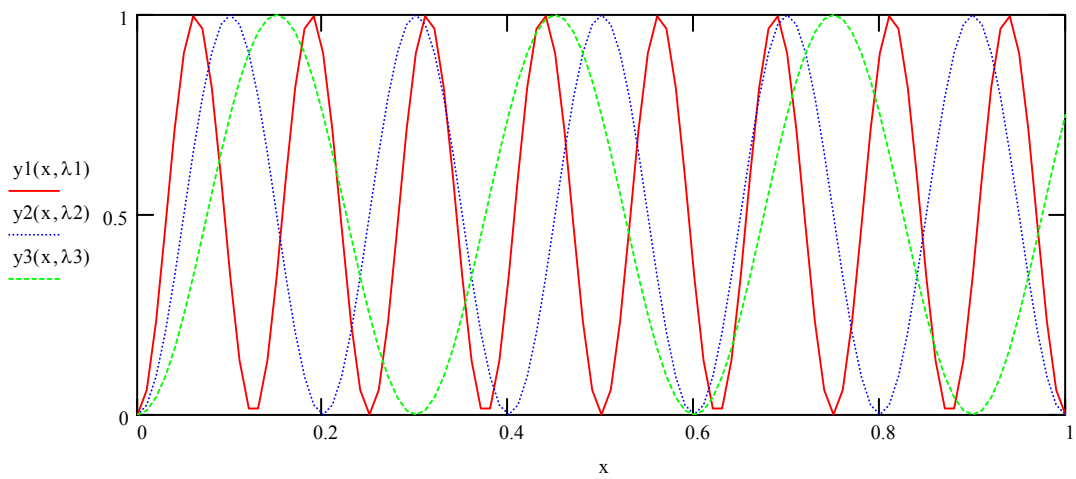
$$\alpha := .002 \quad \lambda 1 := .0005 \quad \lambda 2 := .0008$$

$$x := 0, .01.. 1$$

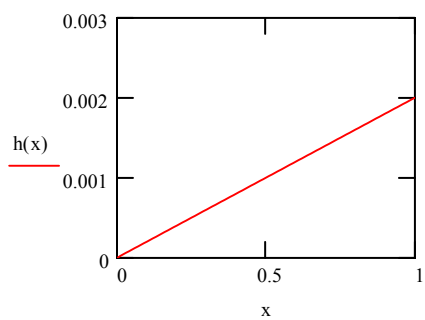
$$y1(x, \lambda 1) := \cos\left(2 \cdot \pi \cdot x \cdot \frac{\tan(\alpha)}{\lambda 1} + \frac{\pi}{2}\right)^2$$

$$y2(x, \lambda 2) := \cos\left(2 \cdot \pi \cdot x \cdot \frac{\tan(\alpha)}{\lambda 2} + \frac{\pi}{2}\right)^2 \quad \lambda 3 := .0012$$

$$y3(x, \lambda 3) := \cos\left(2 \cdot \pi \cdot x \cdot \frac{\tan(\alpha)}{\lambda 3} + \frac{\pi}{2}\right)^2$$



Height at x $h(x) := x \cdot \tan(\alpha)$



Distance between two Maxima depending on α $xx = \lambda / (2 \tan \alpha)$

$\lambda := .0001, .0002 \dots .0015$

$$xx(\lambda) := \frac{\lambda}{2 \cdot \tan(\alpha)}$$

