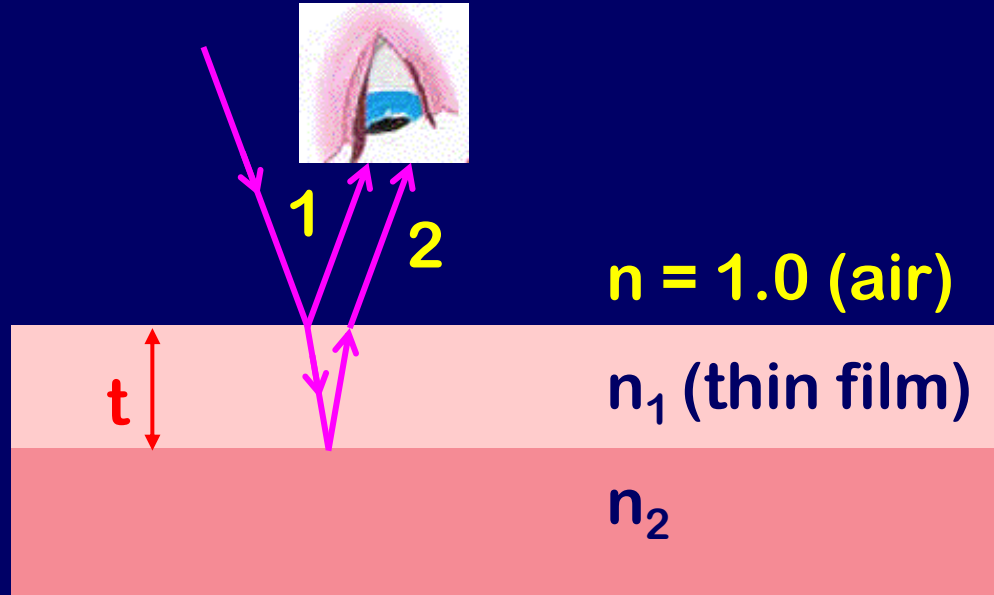


Thin Film Summary

Determine δ , number of extra wavelengths for each ray.



This is important!

$$\text{Ray 1: } \delta_1 = \underbrace{0 \text{ or } \frac{1}{2}}_{\text{Reflection}} + \underbrace{0}_{\text{Distance}}$$

$$\text{Ray 2: } \delta_2 = 0 \text{ or } \frac{1}{2} + 2t / \lambda_{\text{film}}$$

Note: this is wavelength in film! ($\lambda_{\text{film}} = \lambda_o / n_1$)

If $|\delta_2 - \delta_1| = 0, 1, 2, 3 \dots$ (m) **constructive**

If $|\delta_2 - \delta_1| = \frac{1}{2}, 1 \frac{1}{2}, 2 \frac{1}{2} \dots$ ($m + \frac{1}{2}$) **destructive**