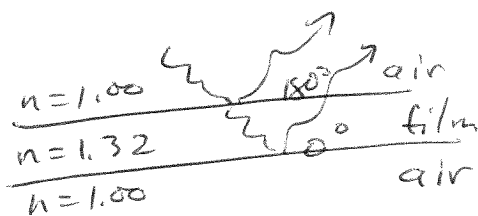


Ch.3 Prob.69

$$n = 1.32$$

$$\lambda = 500 \text{ nm}$$



Find minimum thickness that gives minimum reflection.

~~top layer~~ top layer shifts the wave by 180°
The bottom layer shifts the wave by 0°
to get minimum reflection

$$\Delta l = 0, \lambda, 2\lambda \quad \text{by } \Delta l = 2t \cdot n$$

so minimum thickness that is non-zero gives

$$\lambda = 2t \cdot n$$

$$t = \frac{\lambda}{2n} = \frac{500 \text{ nm}}{2(1.32)} = \cancel{1.8} \boxed{189 \text{ nm}}$$