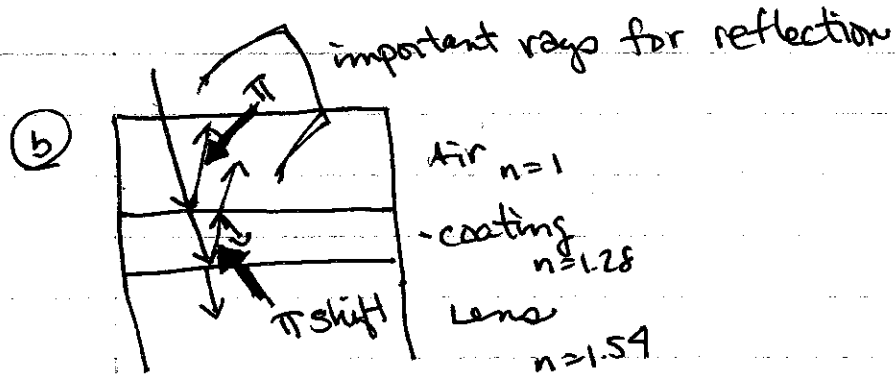


② $n = 1.54$ $n_{\text{coat}} = 1.28$ $\lambda = 510 \text{ nm}$

① $f\lambda = c$ $f = \frac{c}{\lambda} = \frac{3 \times 10^8}{510 \times 10^{-9}} = 5.88 \times 10^{14} \text{ Hz}$



$\pi, 3\pi, 5\pi, \dots = 0 + \frac{2dn(2\pi)}{\lambda_0}$

destructive (minimum) reflection \uparrow phase shifts cancel path difference contribution

$\pi = \frac{2dn(2\pi)}{\lambda_0}$ $d = \frac{\lambda_0}{4n} = \frac{510 \text{ nm}}{4(1.28)} = \underline{\underline{99.6 \text{ nm}}}$ ③

reflect strongly

$2\pi, 4\pi, 6\pi, \dots = 0 + \frac{2dn(2\pi)}{\lambda}$

$\lambda = 2dn$ or $\frac{2dn}{3}$...

$2(99.6)(1.28) = 255 \text{ nm}$ or $\frac{2(99.6)(1.28)}{3} = 127 \text{ nm}$ not visible