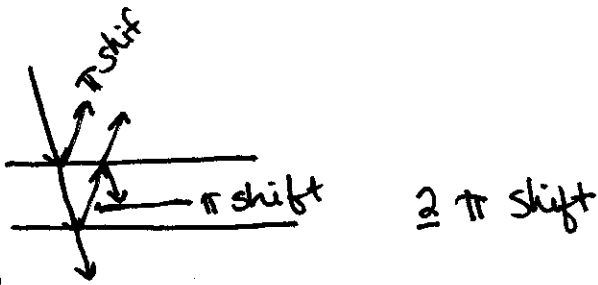


2.

$n=1$ Air

$n=1.42$ Oil

$n=1.50$ Glass



constructive

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

$$\frac{2dn}{\lambda} = 0, 1, 2, 3, \dots$$

$$\lambda = \frac{2dn}{1}, \frac{2dn}{2}, \frac{2dn}{3}, \dots$$

$$2(500\text{nm})(1.42) = 1420\text{nm}$$

710nm ✓ visible

473nm ✓

355nm

dest $\frac{2dn}{\lambda} = \frac{1}{2}, \frac{3}{2}, \frac{5}{2}, \dots$

$$\lambda = \frac{4dn}{1}, \frac{4dn}{3}, \frac{4dn}{5}$$