2) Brewster's angle
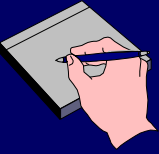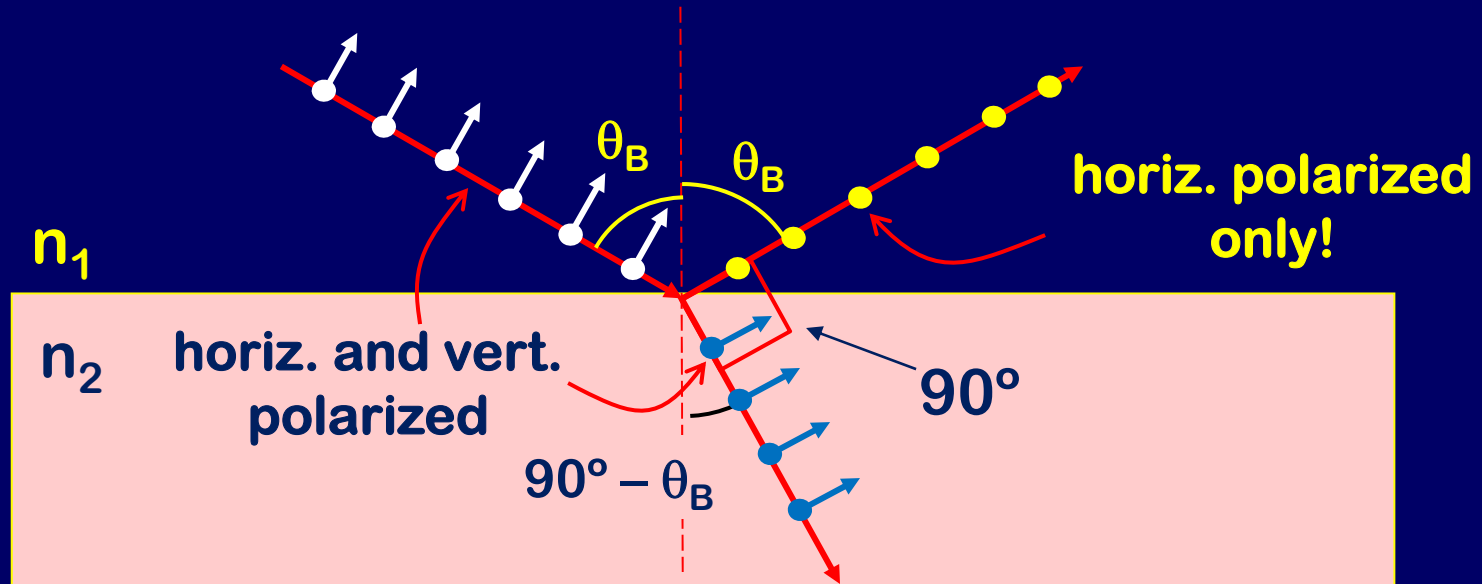
Reflected light is usually unpolarized (mixture of horizontally and vertically polarized). But…

When angle between reflected beam and refracted beam is exactly 90 degrees, reflected beam is 100% horizontally polarized !

$$n_1 \sin \theta_B = n_2 \sin (90 - \theta_B)$$

$$n_1 \sin \theta_B = n_2 \cos (\theta_B)$$

$$\tan \theta_B = \frac{n_2}{n_1}$$