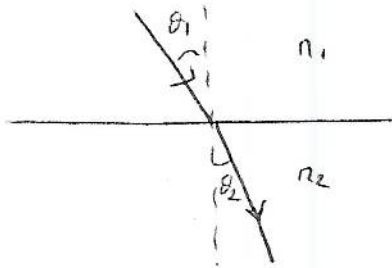


- 1) A flashlight shines on a flat slab of glass at an unmeasured angle. The angle of refraction for the light is 3 degrees. What is the angle of incidence? [10 pts]  $n_{\text{glass}} = 1.3$



$$n_1 \sin \theta_1 = n_2 \sin \theta_2$$

$$1. \sin \theta_1 = 1.3 \times \sin 3$$

$$\theta_1 = \sin^{-1}(1.3 \times \sin 3)$$

$$\theta_1 = 3.9^\circ$$