Example: Refraction at Water/Air Interface
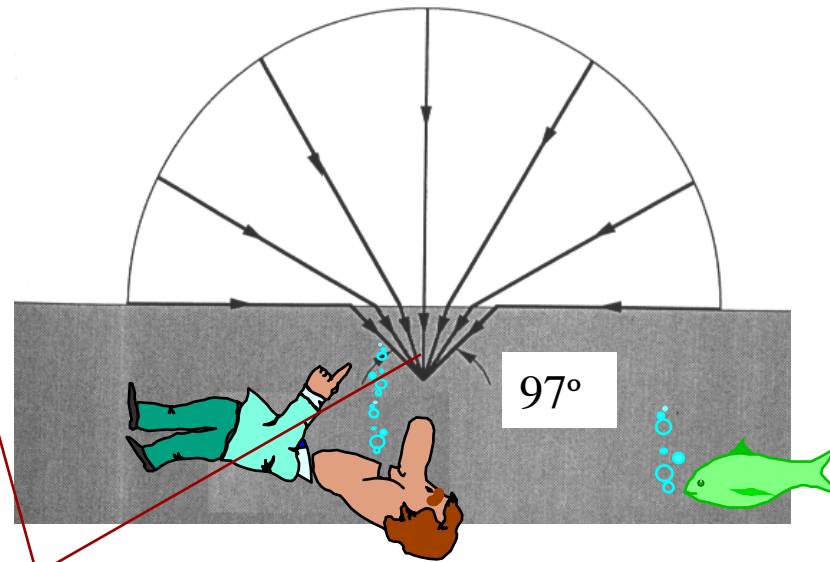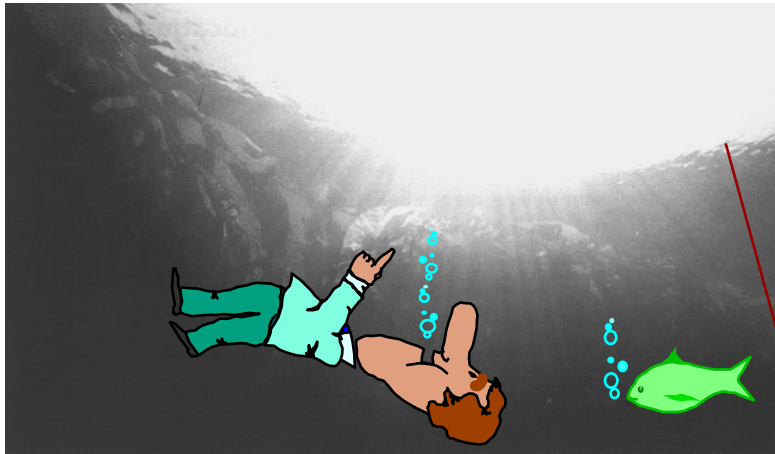
Diver's illusion

Diver sees all of horizon refracted into a 97° cone

$$\theta_1 = 90° \quad \Rightarrow \quad \sin \theta_2 = \frac{n_1}{n_2} \sin 90° = \frac{n_1}{n_2} = \frac{1}{1.33} \quad \Rightarrow \quad \theta_2 = 48.5°$$