

**Answer on question #69057, Physics / Mechanics**

**Question** From the graph, what is the critical angle for glass - air interface?

**Solution** Critical angle is

$$\theta_c = \arcsin \frac{n_2}{n_1}$$

The relation of refractive indexes is in our case  $\frac{n_2}{n_1} = \frac{1}{1.5}$ . Hence

$$\theta_c = \arcsin \frac{2}{3} \approx 41.81^\circ$$