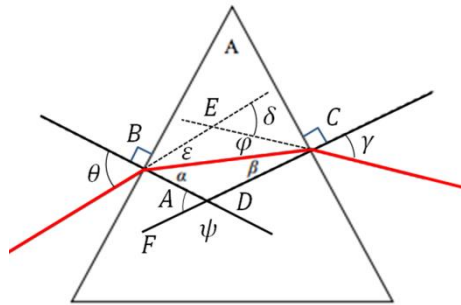


Answer on Question #83417, Physics / Optics

Question. A ray of light is refracted through a prism of angle 70° . If the angle of refraction in the glass at the first face is 28° , what is the angle of incidence in the glass at the second face?

Solution.

For prism



$$\alpha + \beta = 180^\circ - \psi = 180^\circ - 180^\circ + A \Rightarrow A = \alpha + \beta.$$

In our case

$$\alpha = 28^\circ \text{ and } A = 70^\circ.$$

So,

$$\beta = A - \alpha = 70^\circ - 28^\circ = 42^\circ.$$

Answer. $\beta = 42^\circ$.

Answer provided by <https://www.AssignmentExpert.com>