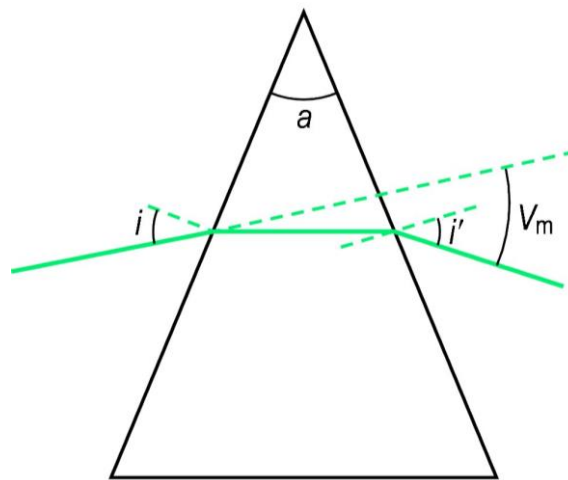# Answer on Question #38972, Physics, Optics

A light ray of angle of incidence 40 degree emerged from the prism in minimum deviation position. Then what is the angle of incidence on the second surface?

(1) 90 degree

(2) 0 degree

(3) 40 degree

(4) 0 degree

**Solution:**



Prism (*a*, prism angle; *i*, angle of incidence = *i'*, angle of emergence; $V_m$, angle of minimum deviation)

For minimum deviation position the incident ray and emergent rays are symmetrical with respect to the refracting surface.

Thereby,   *i*= *i'*.

**Answer.** (3) 40 degree.