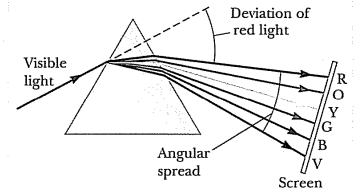


KC's Quantitative Problems

Index of Refraction

Optics.Index-Refraction.QP.KC.1: The index of refraction for violet light in silica flint glass is 1.66, and that for red light is 1.62. What is the angular spread of visible light passing through the prism of apex angle 60.0° if the angle of incidence is 50.0° ?



Optics.Index-Refraction.QP.KC.2: While investigating the properties of an unknown material it is found that light travels through it at 41.3% the speed of light in a vacuum. (a) What is the unknown material? (b) If light, that has a wavelength of 600 nm in water, is shined through the material, what will be the wavelength of the light in the unknown material?