

Answer on Question #52737-Physics-Optics

What is the refractive index of glass material for which the speed of light in it is 1.92×10^8 m/s?

2.41

1.56

0.54

1.35

Solution

The refractive index of glass material is

$$n = \frac{c}{v} = \frac{3.00 \cdot 10^8 \frac{m}{s}}{1.92 \cdot 10^8 \frac{m}{s}} = 1.56.$$

Answer: 1.56.

<http://www.AssignmentExpert.com/>