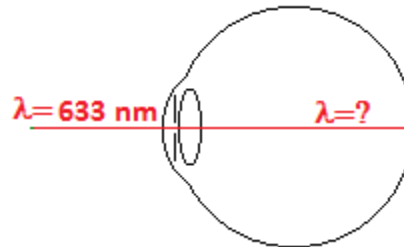# Physics I

Basic Waves

Fundamental equation of waves $\qquad \lambda f = v_{wave}$

Problem 1.- In air the speed of light is 3.00×10^8 m/s and red light from a He-Ne laser has a wavelength of 633 nm. Calculate the wavelength of that red light inside the human eye where the speed of light is 2.33×10^8 m/s, knowing that the frequency is the same.

Problem 1a.- In air the speed of light is 3.00×10^8 m/s and green light has a wavelength of 532nm. Calculate the wavelength of green light inside the human eye where the speed of light is 2.33×10^8 m/s, knowing that the frequency is the same.