Practice Problems:  *Wavelength, Frequency, Energy content of One Quantum of Light.*

Examples:

I. A certain photon of light has a wavelength of 422 nm. **What is the frequency** of the light?

II. **What is the energy** of a quantum of light from part I.

1. What is the energy of a quantum of light with a frequency of $7.39 \times 10^{14}$ Hz?

2. What is the wavelength of the quantum of light in question 1?

3. A certain red light has a wavelength of 680 nm. What is the frequency of the light?
4. What is the energy of a quantum of light from question 3?

5. A certain blue light has a frequency of $6.91 \times 10^{14}$ Hz. What is the wavelength of the light?

6. What is the energy of a quantum of light from question 5?

7. The energy for a quantum of light is $2.84 \times 10^{-19}$ J. What is the wavelength of this light?