

Relationship of Wavelength & Frequency Worksheet

$$c = \lambda \nu$$

1. Calculate the frequency (ν) of an infrared wavelength (λ) measured at 4.68×10^{-5} m.
2. Calculate the wavelength (λ) of a light if the frequency (ν) of the radiation is 4.52×10^{14} Hz. Where does this fall on the electromagnetic spectrum?
3. Calculate the wavelength (λ) of a light if the frequency (ν) of the radiation is 7.47×10^9 Hz. Where does this fall on the electromagnetic spectrum?
4. Calculate the frequency (ν) of an x-ray wavelength (λ) measured at 9.22×10^{-10} m.
5. Calculate the frequency (ν) of a radio wavelength (λ) measured at 5.78×10^1 m.
6. Calculate the wavelength (λ) of a light if the frequency (ν) of the radiation is 6.34×10^{11} Hz. Where does this fall on the electromagnetic spectrum?