

Name: _____

Date: _____

Wave, Speed, Frequency, & Wavelength Practice Problems

$$v = f\lambda$$
$$c = f\lambda$$

$$c = 300,000,000\text{m/s}$$
$$(c = 3 \times 10^8 \text{ m/s})$$



1. A low-frequency radio wave has a frequency of 250,000Hz. What is the wavelength of this radio wave? (Hint: Don't forget that this is an electromagnetic wave, and therefore you should automatically know its speed)

2. A certain microwave has a wavelength of 0.032 meters. Calculate the frequency of this microwave.

3. Sound waves in air travel at approximately 330m/s. Calculate the frequency of a 2.5 meter long sound wave.

4. A wave on a certain guitar string travels at a speed of 200m/s. Calculate the wavelength of an "A" note sounding at 440Hz.

