Problem Set #1 - Wave Properties

1. The frequency of a wave is 560 Hz. What is its period?

2. A girl floats in the ocean and watches 12 wave crests pass her in 46 s. Calculate the wave’s:
   a. frequency
   b. period

3. The period of a wave is 0.044s. How many vibrations will the energy source make in 22s?
Problem Set #2 - Wave Properties

1. A distance of 0.33 m separates a wave crest from the adjacent trough, and the vertical distance from the top of a crest to the bottom of a trough is 0.24 m.
   a. What is the wavelength?
   b. What is the amplitude?

2. What is the speed of a 256 Hz sound with a wavelength of 1.35 m?

3. You dip your finger into a pan of water 14 times in 11 s, producing wave crests separated by 0.16 m. Calculate the wave:
   a. frequency
   b. period
   c. velocity