Speed of Sound

1. How far does sound travel during 0.002 second, assuming the velocity is 344 m/s?
2. A sound wave is produced 300 m away from you. Assuming the air is 20 °C, what is the time required for the sound to reach you?
3. You call to a friend on the other side of a pool on a hot, summer day. The temperature is 35°C. How fast does the sound of your voice travel?
4. If the wavelength of a 440 Hz sound in fresh water is 3.3 m, what is the speed of sound in this medium?
5. What is the temperature in the Philadelphia Spectrum if the speed of the sound is recorded at 350 m/s?
6. The temperature in the auditorium is 30°C and you are standing 35 m from the stage.
A.) How long does the sound take to reach you?
B.) What is the frequency if the wavelength is 70 cm?