**Worksheet 2 - Sound**

1. An FM radio station’s basic frequency has a wavelength of 2.67 m. What is its frequency?
2. You are at a stop light in your car, stuck behind a red light. Just before the light is supposed to change, a fire engine comes zooming up towards you traveling at a horrendous 85.0 km/h. If the siren has a rated frequency 665 Hz, (a) what frequency do you hear? (b) what is the wavelength of the sound you hear?
3. You are on a train traveling at 105 km/h. You approach a stationary 455 Hz siren. What is frequency you hear?
4. You are on a train traveling at 55.0 km/h. You approach a bell. The actual frequency of the bell is 725 Hz. What frequency do you hear?