Phys 215 - Pre-Lab 8
The Speed of Sound in Air

1. What is the objective of this experiment? (2 pts.)

2. What is a standing wave? (2 pts.)

3. What is a resonant frequency? (2 pts.)

4. Explain the relationship \( v = \lambda f \). (2 pts.)

5. You measure \( \frac{\lambda}{2} \) to be 70 cm. The temperature in the lab is 22°C. What is the frequency of the resonance? Refer to equation in question four above and use \( v = (331.50 + 0.61T) m/s \). Show all work. (2 pts.)