**Physics**

**Group quiz #2 on standing waves**

Name

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| Favorite ice cream flavor  **Show your work, and circle your answers and use sig figs to receive full credit.**  A flute is a both ends open pipe that is 0.952 m long. The speed of sound in the pipe is 342 m/s. What is the frequency of the third harmonic? What are the frequencies of the first three harmonics?  What is the wavelength of the second harmonic on a 0.68 m long guitar string? (Both ends fixed) If it has a frequency of 412 Hz, what is the wave speed on the string? What are the frequencies of the first three harmonics?  A pan pipe(one end fixed, one end open) is 0.26 m long. What is the frequency of the fundamental (first harmonic) if the speed of sound in the pipe is 324 m/s. What is the frequency of the first three harmonics? |
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