

345.9300

Incorrect

Question 3

0 / 2 pts

Determine the length of the resonance tube in centimeters for a sound wave of wavelength 0.66 meters, given that L_{corr} is 2 cm, if the fundamental mode is resonating in the tube.

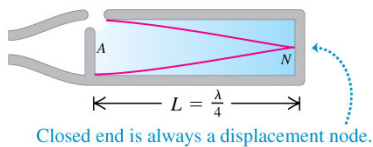
163.0000

Incorrect

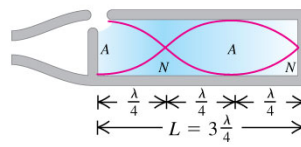
Question 4

0 / 2 pts

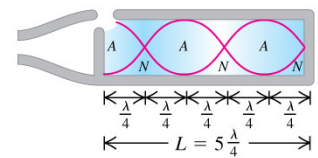
(a) Fundamental: $f_1 = \frac{v}{4L}$



(b) Third harmonic: $f_3 = 3\frac{v}{4L} = 3f_1$



(c) Fifth harmonic: $f_5 = 5\frac{v}{4L} = 5f_1$



From the image above, determine the wavelength of the third harmonic in terms of the length L of the tube.

$\lambda = 4L/f$

Incorrect

Question 5

0 / 2 pts

After taking your measurements in the lab you find that the speed of sound in air is 337.1 m/s. Calculate the theoretical speed of sound in air in a room at 24°C . Report the percent difference between the measured and theoretical speed of sound in air.