

Physics 1101 Experiment 12 Homework

NAME _____

1. What is an antinode? What is a node?

2. A cord 15.0-m long has a mass of 3.00 grams. What is its linear mass density in kilograms/meter?

3. For the cord in problem 2, if the tension were provided by a 2.5-kg mass, how long would the cord be to vibrate with one antinode? Assume $f = 120$ Hz.

4. When standing waves are produced in this experiment, does reducing the tension produce a larger or smaller number of antinodes along the string? Explain.

NOTE: You should answer question 3 in Experiment 12 in the laboratory manual before you come to the laboratory.