

Name: _____

Physics 202 Quiz 5

May 13, 2013

Word Problems

Show all your work and circle your final answer. (Ten points each.)

1. The middle C string on a piano is under a tension of 944 newtons. The period and wavelength of a wave on this string are 3.82 milliseconds and 1.26 meters, respectively. Find the linear density of the string.

- 2.** The mass of a string is 5.0 grams, and it is stretched so that the tension in it is 180 newtons. A transverse wave traveling on this string has a frequency of 260 Hz and a wavelength of 0.60 meters. What is the length of the string?