

Please complete the following homework assignment in the space provided. It is due on Tuesday, February 10<sup>th</sup> at 9:00 am.

1. Light and Matter (online text):

[http://www.lightandmatter.com/html\\_books/3vw/ch04/ch04.html](http://www.lightandmatter.com/html_books/3vw/ch04/ch04.html)

Problems 1, 3 and 4, 5

2. Hobson Ch 8 Ex 8 and 9 and Problems 1, 7, and 10.

3. Violinists sometimes bow a string in such a way that the maximum vibration (antinode) is at one quarter and three quarters of the length of the string, rather than at the middle of the string. What is the effect on the frequency of the string?