

## PHY1308 - Homework 6

Expectations for the quality of your handed-in homework are available at <http://www.physics.smu.edu/sekula/phy1308/homework.pdf>. Failure to meet these guidelines will result in loss of points as detailed in that document. **This assignment is due on Friday, Mar. 11 by 5:00pm (please place it in Prof. Sekula's mailbox in FS102)**

### ***Reading Assignment***

- Chapter 25

### ***Practice Problems***

These are not required; they are odd-numbered problems from Wolfson that may help you to warm up for the required problems.

- CH25-19
- CH25-21
- CH25-27
- CH25-35
- CH25-75

### ***A Note on Significant Figures***

Wolfson's representation of numbers can often make interpreting the number of significant figures very difficult. Here are some rules you can follow, and which the solutions will adhere to:

1. If an integer number has a trailing zero (e.g. 50 or 100), but no decimal point to indicate that zero is significant, TREAT THE TRAILING ZEROS AS SIGNIFICANT.
  - a) Example: 100 will have three significant figures. 50 will have two.
2. If an integer less than 10 is given, assume it is INFINITELY SIGNIFICANT
  - a) Example: 2 has infinite precision, and should be treated like 2.0000000...

### ***Required Problems***

- CH25-18 (5 Points)
- CH25-20 (5 Points)
- CH25-24 (10 Points)
- CH25-26 (10 Points)
- CH25-36 (10 Points)
- CH25-44 (10 Points)
- CH25-64 (30 Points)
- CH25-76 (20 Points) – read problem CH25-75 first!

