Physic 215
Pre-Lab 1
Measurement and Error Analysis

1. What are the definitions of accuracy and precision? (1 pt.)

2. Define the three types of errors. (1 pt.)

3. What is the uncertainty of measurement for most instruments in this lab? (1 pt.)

4. Given the following measured values, determine the specified product and the sum (use the explanation of significant figures in your text). (2 pts.)

   \[
   x = 33.33 \\
   y = 2100 \\
   z = 10.124 \\
   \]

   \[x \times y \times z = \underline{\phantom{0000}}\quad x + z = \underline{\phantom{0000}}\]

5. What are the fundamental quantities (include units) of mechanics? (1 pt.)

6. Create Data Tables in your lab notebook for each part of Experiment 1. Sketch the tables on the back of this pre-lab (show appropriate headings and columns). (4 pts.)