Pre-lab
PHYS 221
Experiment 1-Measurement

Please note that questions 1&2 are taken from the Laboratory Appendix

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

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

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3. Complete the following calculation using the explanation of significant figures given below. (3 pts.)

   When **multiplying and dividing** several quantities, the number of significant figures in the final answer is the same as the number of significant figures in the least accurate of the quantities being multiplied.

   When numbers are **added or subtracted**, the number of decimal places in the result should equal the smallest number of decimal places of any term the sum

   Given $x = 33.33$, $y = 2100$, and $z = 10.124$,
   Determine $x * y * z =$ _____
   $x + z =$ _____

Questions 4 and 5 are taken from experiment procedure.

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4. What are the fundamental quantities of mechanics? (1 pt.)

5. Create data tables in your lab notebook for each part of the **measurement experiment** . Use back of pre-lab and show appropriate headings. (4 pts.)