**Name:** _____    **Lab TA:** _____

| **Lab Day** | **Mon** | **Tue(am)** | **Tue(pm)** | **Wed** | **Thu(am)** | **Thur(pm)** | **Fri** |
|---|---|---|---|---|---|---|---|

**Grade**

>95     >90     >85     >80     >70     <70

**Report:**

**Prelaboratory Quiz Score:**

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## Data Collection and Calculations:

I. **Precision and Accuracy:**

1.      Density of Water at the laboratory temperature:      _____

| 2. Graduated Cylinder | | Trial 1 | Trial 2 |
|---|---|---|---|
| a. | Desired volume of water | 5.0 mL | 5.0 mL |
| b. | Mass of Erlenmeyer Flask | | |
| c. | Mass of Erlenmeyer + Water | | |
| d. | Mass of Water | | |
| e. | Density of Water | | |
| | Discrepancy:  (e-1) | | |
| **3. Pipettor** | | **Trial 1** | **Trial 2** |
| a. | Desired volume of water | 5.0 mL | 5.0 mL |
| b. | Mass of Erlenmeyer Flask | | |
| c. | Mass of Erlenmeyer + Water | | |
| d. | Mass of Water | | |
| e. | Density of Water | | |
| | Discrepancy:  (e-1) | | |
| **4. Buret** | | **Trial 1** | **Trial 2** |
| | Final buret reading | | |
| | Initial buret reading | | |
| a. | Desired volume of water | 5.0 mL | 5.0 mL |
| b. | Mass of Erlenmeyer Flask | | |
| c. | Mass of Erlenmeyer + Water | | |
| d. | Mass of Water | | |
| e. | Density of Water | | |
| | Discrepancy:  (e-1) | | |

5. Since the other experimental parameters are the same, the calculated density values reflect errors introduced in measuring the volume of water. Which measuring tool do you consider to be the most precise (consistent).

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6. Do you consider any of the above instruments to be both accurate and precise.

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## II. The Unlabeled Soda Containers

Very Briefly outline how you tried to solve this problem?

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**Data Table:**

| Container 1 | Trial 1 | Trial 2 |
|---|---|---|
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| | | |
| | | |
| | | |
| **Container 2** | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| **Identity of Container 1** | | |
| **Identity of Container 2** | | |

**Sample Calculation (if applicable)**