

## MEASUREMENTS AND CALCULATIONS

### ***ANSWERS:***

#### PRACTICE PROBLEMS:

V. Determine the percent error for the set of data:

lab determined density = 4.22 g / mL , true density for the sample = 4.69 g / mL

#### ***Answer:***

$$\% \text{ Error} = \frac{\left| \text{measured value} - \text{true value} \right|}{\text{true value}} \times 100$$

$$\% \text{ Error} = \frac{\left| 4.22 \frac{\text{g}}{\text{mL}} - 4.69 \frac{\text{g}}{\text{mL}} \right|}{4.69 \frac{\text{g}}{\text{mL}}} \times 100 = 10.02\%$$