

Name \_\_\_\_\_ Section \_\_\_\_\_ TA \_\_\_\_\_

1. Report each of these averages and standard deviations to the correct number of significant digits. If it is already written correctly, just write “correct” next to the entry.

a)  $56.7 \pm 11.09$

b)  $234.0 \pm 5.0$

c)  $0.009876 \pm 0.000288$

2. If you make the following measurements in lab, what is the density of your sample? Show your work and report your answer to the correct number of significant digits.

Initial burette reading 1.25 ml

Final burette reading 22.43 ml

Empty beaker: 32.8946 grams

Beaker with sample: 55.0032 g

3. Calculate and report the result using the correct number of significant digits:

a)  $25 + 1.4998 =$

b)  $5.85 \times 90.00 + \frac{87.96}{2.42} =$

4. Give an example of a source of random error in Experiment 1.