Significant Figures Reinforcement (2.2) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chem 332 – O’Dette Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_

Determine the number of significant figures in each of the following measurements, then explain the rule(s) you used to determine your answer. Remember, you have four rules for determining sig figs, and one measurement may require you to apply more than just one rule.

Sample:

1. 4.56 3 All non-zero numbers are significant

You try:

1. 63 ­­
2. 6.08 ­­
3. 0.004 ­­
4. 56,000 ­­
5. 20.0 ­­
6. 10.003 ­­
7. 302,700 ­­
8. 2,300.0 ­­

Complete the following calculations. Report your answer in the correct number of sig figs. Use your rule for addition/subtraction and your rule for multiplication/division.

1. 2.334 / 44.6
2. 89.600 / 32
3. 4.5 x 104 X 3.55 x 10-7
4. 9.12 x 106 X 0.5
5. 2.35 x 102 / 6.77 x 109
6. 6.02 x 1023 X 5.33 x 105