**Measuring and Significant Digits**

1. Measure the volume of liquid in the graduated cylinders below. Pay attention to units and precision.

a) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_mL b) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_mL



1. Measure the volume of liquid in the burettes below:

a) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_mL



* 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_mL
1. Record the reading from the voltmeter shown below. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



4) Using a ruler, measure the length of the following lines:

a) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ length: \_\_\_\_\_\_\_ cm

b) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ length: \_\_\_\_\_\_\_ cm

c) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ length: \_\_\_\_\_\_\_ cm

d) \_\_\_ length: \_\_\_\_\_\_\_ cm

4. Indicate how many significant digits are contained in each of the following values.

|  |  |  |
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| a) 6.317 | e) 3.98 | i) 921 |
| b) 0.08091 | f) 207.0  | j) 0.00219 |
| c) 4.30 × 103 | g) 0.00010 | k) 92 100 |
| d) 12.0 | h) 4.0020 | l) 92 100. |

5. How many significant digits should be in the following answers? (Don’t work out the problems!)

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