

Physics 1101 Experiment 1 Homework

NAME _____

1. Define density and state its units in the SI system of units.
2. What does a negative zero reading on a vernier caliper mean?
3. Calculate the average value for the following experimentally determined numbers: 2.54, 2.76, 2.43, 2.55, and 2.68. If the standard value is 2.66, what is the percent error in your measurements? All numbers have units of cm.
4. Describe the general makeup of the composite cylinder you will use in this experiment.
5. A rock is placed in a graduated cylinder containing water, and the cylinder is covered to avoid evaporation. The next morning the water level has dropped by 5.6 ml. No one has had access to the cylinder, and the cylinder has no leaks. What is the most likely explanation for what happened?

NOTE: You should answer questions 1 and 2 in Experiment 1 in the laboratory manual before you come to the laboratory.