

PERCENT ERROR & DENSITY PROBLEMS

Name _____

Percent Error ("Percent Deviation")

1. A student calculates the density of a solid as 7.2g/ml. The accepted value for the density is 8.0 g/ml. What is the student's percent of error?
2. A student measures the mass of a rock as 48.2 g. The rock is actually 45.3 g. What is the student's percent deviation?

Density

3. What is the density of a substance with a mass of 36.8 g and a volume of 4 cm³?
4. What is the density of a metal bar with a mass of 70.2 g and dimensions of 2 cm by 1.5 cm by 3 cm?
5. The water level in a graduated cylinder is 25 ml. When a solid is put into the graduated cylinder, the water rises to the 31 ml mark. If the solid has a mass of 27.6 g, what is the density of the solid?