

Density Calculations

1. What is the density of a solid that has a volume of 1.30 ml and a mass of 2.00 grams?
2. If you have 5.00 ml of benzene, how many grams do you have if the density is 0.876 g/ml?
3. If you add 7.00 grams of solid to 45.00 ml of water and the solution rises to 52.49 ml, what is the density of the solid?
4. What is the volume of a solid that has a mass of 5.00 grams and a density of 1.23 g/ml?
5. If you add a 5.00 lb object to 3.50 liters of water and the water level rises to 4.27 liters, what is the density of the object in (g/ml)?
6. If 5.76 grams of a solid is added to an initial amount of pure water (at 25°C) and the water level rises to 120 ml. If the density of the solid is 2.36 g/ml, what was the initial amount of pure water?
7. If liquid water has a density of 1.00 g/ml at 25°C and you allow 48 ml of water to freeze in a 50 ml glass container, will the container break? If so, why? (Density of ice is 0.934 g/ml)

