

1. Calculate the mass in grams for each of the following:

251.2 mL of gasoline ($d = 0.690 \text{ g/mL}$)

32.5 mL of ether ($d = 0.714 \text{ g/mL}$)

7.65 cm^3 of rock salt ($d = 2.18 \text{ g/cm}^3$)

2. Calculate the volume in mL or cm^3 for each of the following:

0.560 g of methanol ($d = 0.790 \text{ g/mL}$)

1.00 kg of iron ($d = 7.87 \text{ g/cm}^3$)

2.61 g of ammonia ($d = 0.759 \text{ g/mL}$)

3. Calculate the density for each of the following:

25.1 mL of ethanol having a mass of 15.8 g

A 131.5 g bronze rectangular nugget measuring 3.55 cm x 2.50 cm x 1.75 cm

An 11.6 g marble whose volume is 4.1 mL

4. What is the density of a nugget of Fool's Gold of a 37.51 g sample added to a graduated cylinder increased the liquid level from 50.0 mL to 62.5 mL?

5. A car battery contains 1275 mL of sulfuric acid. If the density of battery acid is 1.84 g/mL, how many grams of acid are in the battery?