

Extra Practice Problems for Chapter 1 Test

1. How many significant figures are in each of the following numbers:
 - a. 407.0
 - b. 0.51
 - c. 30716
 - d. 0.070910
 - e. 300.120
 - f. 8408.02
 - g. 0.0004380

- 2) Convert the following to scientific notation:
 - a. 61500
 - b. 0.0000568
 - c. 321
 - d. 9057.00
 - e. 0.003283

- 3) Solve the following using the correct number of significant figures:
 - a. $1.23 \text{ m} * 0.89 \text{ m}$
 - b. $\frac{923 \text{ g}^3}{20312 \text{ g}}$
 - c. $7.987 \text{ m} - 0.54 \text{ m} - 2.3214 \text{ m}$
 - d. $3.12 \text{ g} + 0.8 \text{ g} + 1.033 \text{ g}$

- 4) Solve the following problems involving density:
 - a. The mass of a wooden block is 5.854 g and the volume is 7.57 cm³. What is the density of the wooden block?
 - b. When dropped in a graduated cylinder a metal pipe displaces 6.3 mL of water and has a mass of 78 g. What is the density of the metal pipe?
 - c. What is the volume of a ball that has a mass of 65.3 g and a density of 0.732 cm³?
 - d.

- 5) Convert the following:
 - a. 154 lbs → kg
 - b. 62.1 mm → yds
 - c. 34 gal → L
 - d. 10.23 km → miles
 - e. 830 oz → dg