

Significant Figures Practice Sheet 1

**Practice Problems — Counting Significant Figures in a Measured Value**

1. How many significant figures are in each of the following measured values?

(a) 425 mL \_\_\_\_\_

(d)  $1.50 \times 10^4$  L \_\_\_\_\_

(b) 590.50 g \_\_\_\_\_

(e) 3400 m \_\_\_\_\_

(c) 0.00750 s \_\_\_\_\_

2. Round the following measurements to the stated number of significant figures.

(a) 30.54 s (3 sig figs) \_\_\_\_\_

(c) 4.49 m (2 sig figs) \_\_\_\_\_

(b) 0.2895 g (3 sig figs) \_\_\_\_\_

(d) 100.4°C (2 sig figs) \_\_\_\_\_

Multiplication and Division in Significant Figures.

**Quick Check**

Give the answer to each of the following problems with the appropriate unit and the correct number of significant figures:

1.  $0.14 \text{ m} \times 14.00 \text{ m} =$  \_\_\_\_\_

2.  $940 \text{ g} \div 0.850 \text{ mL} =$  \_\_\_\_\_

3.  $0.054 \text{ g} \div 1.10 \text{ s} =$  \_\_\_\_\_

Addition and Subtraction in Significant Figures.

**Practice Problems— Significant Figures in Addition and Subtraction Calculations**

Give the answer to each of the following problems with the correct number of significant figures:

1.  $16.407 \text{ mL} + 5.70 \text{ mL} =$  \_\_\_\_\_

2.  $0.32 \text{ g} + 0.009 \text{ g} =$  \_\_\_\_\_

3.  $750 \text{ m} + 8.001 \text{ m} =$  \_\_\_\_\_