1. Precision occurs when \_\_\_\_\_

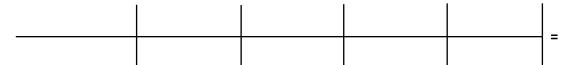
NOTE: For a measurement to be *precise* the <u>last digit</u> can vary by  $\pm 2$  but the <u>second to last digit</u> must be the **same**. Example: Actual Value = **187** Precision values include **185**, **186**, **187**, **188**, and **189** 

2. Accuracy occurs when \_\_\_\_\_\_\_.

NOTE: A general rule for accuracy is that the degree of accuracy is **half a unit** each side of the unit of measure. So for the value **187**, the accuracy range would be **186.5 to 187.5**.

3. Write the formula for finding percent error.

- 4. If you calculate the density of water to be 0.85 g/ml, what is your percent error if the actual density of water is 1.00 g/ml?
- 5. The manufacturer recorded the volume of liquid to be 500.0 ml. When measured, a student found it was 499.7 ml. What was the student's percent error?
- 6. How many seconds have you been alive?



7. Convert 132 cm to \_\_\_\_\_ meters



9. Convert 380 joules = \_\_\_\_ kilojoule

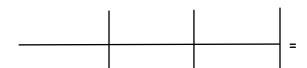


8. Convert 0.47 L = \_\_\_\_ mL



\_\_\_\_\_=\_\_\_=

10. Convert 2.5 gallons = \_\_\_\_ mL



1 gallon = 3.79 liters

11. You're throwing a pizza party for 15 friends and figure each person might eat 3 slices. You want to know how much the party will cost, so you call up the pizza place and learn that each pizza costs \$14.78 and will be cut into 12 slices. You only have \$50 in your party budget. Do you have enough money?

12. Convert 2.136 cm<sup>2</sup> = \_\_\_\_ km<sup>2</sup>



kilo

hecta

deca

base

deci

centi

milli

13. Convert 2.15 g/mL = ? kg/L



kg/L

