LESSON 6 – PRACTICE PROBLEMS

1. Complete the missing parts of the table. Round to THREE decimal places as need. Simplify all fractions. Show all work.

Fraction	Decimal	Percent
$\dfrac{3}{4}$		
	0.375	
		72%
	1.3	
$\dfrac{2}{7}$		

2. Solve each of the following for x. Round to the hundredths place.

   a. $x = 0.15 \cdot 30$

   b. $x = 0.075 \cdot 100$

   c. $x = 1.5 \cdot 40$

   d. $x = 0.128 \cdot 17.45$

   e. $x = 1.43 \cdot 12$

3. Solve each of the following for x. Round to the hundredths place.

  a. $75x = 5$ b. $12x = 3.25$

  c. $14x = 5.03$ d. $125x = 42$

  e. $\dfrac{1}{3}x = 15$

4. Determine the missing number in each of the following. Round to two decimals.

  a. 6% of what number is 12?   b. 82% of what number is 116?

  c. 123% of what number is 25?   d. 20 is 0.18% of what number?

  e. 120 is 125% what number?

5. Determine the missing number in each of the following. Round to two decimals.

  a. What is 5% of 25?   b. 0.01% of 12 is what number?

  c. 123% of 100 is what number?   d. 12.56% of 72 is what number?

  e. 50% of 127 is what number?

6. Determine the missing number in each of the following. Round to two decimals.

    a. What % of 25 is 5?   b. 12 is what percent of 40?

    c. What percent of 32 is 48?   d. 15 is what percent of 23?

    e. 0.25 is what percent of 3?

7. Determine the percent increase or decrease for the change for each of the following:

    a. 12 to 15   b. 22 to 18

    c. 30 to 60   d. 120 to 90

    e. 90 to 100

8. Solve each of the following application problems using the methods from this lesson.

    a. In a recent poll, 28% of the 750 individuals polled indicated that they would vote purely Democratic in the next election. How many of the individuals would vote a straight Democratic ticket?

b. If you decrease your daily intake of calories from 2500 to 1750, by what percent do your daily calories decrease?

c. On a recent trip to Walmart, you bought $75.25 worth of goods and paid a total of $82.02. What was the rate of sales tax that you paid?

d. If you invest $5000 at simple interest of 8% per year for 6 years, how much money will you earn from interest? How much money will you have at the end of 6 years?

e. In the U.S. Civil War, 750,000 people were estimated to have died. If that number represented 2.5% of the U.S. population of the day, how many people lived in the U.S. during the Civil War? If a war of that scale happened today and the same percentage of people died, how many people would be killed (assume U.S. population of 314,721,724 people). [Source: Smithsonian Magazine, November 2012, page 48]