Name: 9/21/2017 General Math – Test 1

1) Simplify the following and write your answer in scientific notation.

a) $\frac{7.65*10^{-2}}{5.67*10^{4}}$	b) $(42.3 * 10^{4})(6.23 * 10^{-14})$
c) $(10^{5} * 10^{4})^{-2}$	d) $(7.54 * 10^{-2})(3.45 * 10^{9})$

2) Give the name of the following units.

a) dJ	b) km
c) mg	d) hL

3) Give the abbreviation of the following units.

a) picowatt	b) centimeter
c) microsecond	d) millijoule

4) One Step Conversions

a) 0.0723 kJ to J	b) 445 s to ms
c) 15.2 μg to g	d) 9368 pm to m

5) Two Step Conversions

a) 936800 dm to km	b) 587.1 Mg to μg
c) 319000 cL to hL	d) 0.4744 nJ to μJ

6) Basic Conversions

a) 28.68 tsp to mL	b) 2635000 sec to years
c) 0.004279 tons to g	d) 0.3694 m to ft

7) Dawson has driven $9 * 10^{10} mil$ in 1000hr. How fast was he going?

8) Lance drove 90ft at 600m/hr. How long did it take him?

9) Jamie is driving 456ft/sec for 20hr. How far has he gone?

10) Write the following numbers in scientific notation.

a) 0.00462	b) $.0017$
c) 64000	d) 450000

11) Simplify the following expressions. Leave your answers in exponent form with positive exponents.

a) $\frac{15x^9y^5}{20x^4y^9}$	b) $\left(\frac{7^4}{7^9}\right)^{11}$
c) $x^9y^4 * 3^2x^5y^{-10}$	d) $(4^3x^9y^3 * x^2)^6$

Name: 11/9/2017 General Math – Test 3

1) Fill in the missing columns.

Fraction	Decimal	Percent
1/3		
1/4		
	0.5	
	0.125	
		66.7%
		87.5%

2) Find the percent of change in the following problems. Keep one decimal place in all your answers

a) 46 is increased to 54

b) Milk priced went from $3.98 to $4.78

c) 37 is decreased to 25

d) Propane has gone from $3.99 to $1.69

3) Answer the following questions about percentages. Remember the three different types of percent questions we talked about.

a) What is 10% of 40?

b) What is 27% of 102?

c) 56 is what percent of 70?

d) 65 is what percent of 75?

e) 15 is 75% of what number?

f) 46 is 35% of what number?

4) Answer the following mixture problems.
a) You buy a 12oz box of cereal for $5.50 and mix it with a 10oz box of cereal worth $6.85. How much should you charge per ounce of the mixture to break even?

b) You mix a 10lb bag of candy worth $12.45 with a 6lb bag of candy worth $13.39. If you want to make $0.50 per pound of the mixture, how much should you charge?

c) You buy a loaf of bread for $1.5 that has 24 slices of bread, a container of meat for $4 that has 16 slices, a package of cheese for $6 with 14 slices of cheese. How much does it cost to make a sandwich using: 1 slices of bread, 2 slices of meat, and 2 slices of cheese?

5) Calculate the sales tax AND the final price paid/amount earned for the following purchases. When you see the symbol (@) it means "at this price per item."

a) Total Sales: $250
Tax Rate: 9.5%
Tax: $
Total: $

b) Original Price: $500
Discount rate: 30%
New Price: $

c) Bought:
2 Books @ $10
5 cans of soup @ $2
Tax Rate: 10%
Tax: $
Total: $

d) Bought:
Star Wars VI @ $25
3 Shirts @ $15
Tax Rate: 9%
Tax: $
Total: $

6) Lance invested $800 into a savings account that earns 7% interest. If he leaves the money in the account for 7 years, how much interest does he make? How much money does he have now?

7) Caitlynn earned $75 on a savings account that earned 6% interest. If she had left her money in the account for 3 years, how much did she originally invest in the account? How much money does she have now?

8) Taya invested $7,000 in a savings account and earned $68 over 2 years. What was the interest rate she was earning? How much money does she have now?

9) Chris has $950, but he wants $1,000. The money is in a savings account that earns **0.08%**. How long does he have to leave his money in the account? (HINT: How much does he need to make in interest?)

10) The simple interest formula is given by: I=P*r*t. State what each letter represents and the units that go with it.

Name: 10/27/2017 General Math – Quiz 8

1) Write the following numbers as a percent.

a) 7.4	b) .77
c) 61.5	d) .0084

2) Answer the following questions about percentages. Remember the three different types of percent questions we talked about.

a) What is 20% of 90?
b) 20 is what percent of 90?
c) 60 is 50% of what number?

3) Dylan invested $5,000 in a savings account and earned $100 over 5 years. What was the interest rate he was earning? How much money does he have now? (Simple Interest)

4) The simple interest formula is given by: I=P*r*t. State what each letter represents and the units that go with it.

5) Taya invested $400 into a savings account that earns 5% interest. If she leaves the money in the account for 3 years, how much interest does she make? How much money does she have now? (Simple Interest)

Name: 11/3/2017 General Math – Quiz 9

1) Answer the following questions.

a) What is 91% of 200?

b) 26 is 40% of what number?

2) Answer the following questions.

a) What percent of 90 is 15?

b) What percent of 50 is 45?

3) Given the simple interest formula, state what each letter represents AND the units it is measured in.

$$I = P * r * t$$

4) If $I = \$400, P = \$600$, and $t = 3\ years$, what is r?

5) If $P = \$250, r = 12\%$, and $t = 10\ years$, what is I?

6) If $I = \$150, P = \$1000$, and $r = 4\%$, what is P?

Name: 11/17/2017 General Math – Quiz 10

1) Given the following information, fill in the missing numbers and make a pie chart from your answers.

Item	Number of Items	Percent	Degrees
Beads	90		
2-hole buttons	55		
1-hole buttons	10		
4-hole buttons	12		

2) Given the following information, fill in the missing numbers and make a pie chart from your answers.

Item	Mass/g	Percent	Degrees
Corn	81		
Oats	39		
Bugs	20		

Name: 12/1/2017 General Math – Quiz 11

1) Find the mean, mode, and range of the data set. Show the work I asked you to show on your HW.

$$81, 73, 20, 88, 86, 85, 82, 81, 72, 72, 79, 75, 74, 76$$

2) Using the same numbers above, find the:

Min	Lower quartile	Median	Upper quartile	Max	Interquartile range

3) Make a box-and-whisker plot that represents the data above.

20	27	34	41	48	55	62	69	76	83	90