**Chapter 1 Study Guide**

1.1

* Write verbal expressions for equations and write equations given words. (Ex. Write an equation for “three times a number is twenty-four”).
* Know words that mean addition, subtraction, multiplication, and division.
* Substitute in numbers for variables and then solve.

1.2 – 1.3

* Solve equations for variables when it involves addition, subtraction, multiplication, or division.

1.4 - 1.6

* Solve equations when there are variables on both sides of the equal sign.
* Solve equations for a variable. (Ex. Solve A=lw for w)

1.7

* Know the steps for solving absolute value equations.

1. Isolate the absolute value part
2. Determine how many solutions there will be.

* There will be 2 solutions if the absolute value part of the equation equals a positive number.
* There will be 1 solution if the absolute value part of the equations equals 0.
* There will be no solution if the absolute value part of the equation equals a negative number.
* You need to have these memorized!!

1.8-1.9

* Know how to set up a ratio correctly (make sure corresponding sides align)
* Know how to solve equations involving ratios and proportions.
* (Look at the examples in our notes…involving shapes, involving indirect measurement like the shadow problems, etc.)
* Use dimensional analysis to convert from one unit to another. (Ex. Convert miles per hour to feet per sec)

1.10

* Know the difference between precision and accuracy and how they apply to problems. (For example, you will be asked to choose the most precise and most accurate measurement from a group of numbers)
* Find the tolerance of a measurement.
* Look in your notes where you were given a value and had to find +/- a percentage of that number. (Ex. Write the range of the measurement: 320 miles +/- 3% )

**YOU NEED TO FINISH YOUR TEST WITHIN THE 50 MINUTE PERIOD. IF YOU STUDY ENOUGH, YOU SHOULD HAVE NO PROBLEM GETTING DONE ON TIME! 😊**