**Week 1**

**Absolute value**: the distance that a number is from (0) on the number line.

**Additive identity**:  the number (0).

**Additive inverse**:  a number’s opposite; two numbers are additive inverses of each other if their sum is (0)

**Algebraic Expression**: consists of variables, constant s, numerals, operation sign, and / or grouping symbols.

**Arithmetic numbers**:  the whole numbers and the positive fractions, all these numbers can be named with fraction notation (a/b), where (a) and (b) are whole number numbers and (b ≠ 0).

**Associative law of addition:**The statement that when three numbers are added, regrouping the addends gives the same sum.

 **Associative law of multiplication:** The statement that when three numbers are multiplied, regrouping the factors gives the same product.

**Commutative  law  of addition:**  the statement  that when  two numbers  are added, changing, the order in which  the numbers are  added  does  not  affect  the  sum.

**Commutative  law  of multiplication**:  the statement  that when  two numbers  are multiplied, changing, the order in which  the numbers are  multiplied  does  not  affect  the product.

**Constant:** represent numbers that never change.

**Distributive  law  of multiplication over  addition**The statement  that  multiplying   factor by the sum  of two numbers  gives the same  result as multiplying the factor by each of  the two numbers and  then  adding.

**Distributive  law  of multiplication over  subtraction:**The statement  that  multiplying   factor  by the difference  of two numbers  gives the same result  as multiplying the factor by each of  the two numbers and  then  subtracting.

**Equation**: is constructed from algebraic expression with equal sign.

**Evaluating the expression**:  replace all of the variables in an expression with numbers and carry out the operations in an expression.

**Exponent**: in expressions of the form (, the number (n) is an exponent. For (n) natural number, (    represents   (n)   factors of (a).

**Expression**:  consists of variables, constants, operations, sign, it describe a relation.

**Evaluate**: To substitute a value for each occurrence of a variable in an expression.

**Identity  property of  (1)**: the  statement  that  the  product of a number  and (1)  is always  the original  number.

 **Identity  property of  (0):** the  statement  that  the  sum  of a number  and (0)  is always  the original  number.

**Inequality**: a mathematical sentence using

 (<, >, ≤, ≥, or ≠).

**Integers**:  the set of all positive numbers, negative numbers, and zero. Without fraction

  {…... -2, -1, 0, 1, 2…}.

**Multiplication:**  a product of a number and some natural number.

**Multiplication property of (0):** the statement that the product of (0) and any real number (0).

**Multiplicative identity**:  the number (1).

**Multiplicative inverses**: reciprocals, two numbers whose product is (1).

**Natural numbers**:  the set of positive numbers without fraction {1, 2, 3…} used for counting.

**Negative  Integers**: integers  which  located  on the  left  of  the  zero.

**Opposite**:  the opposite, or additive inverse, of a number (a) is denote (- a). Opposites are the same distance from   (0) on the number line but on the different sides of (0).

**Positive Integers**: integers which located on the right of the zero.

**Rational  numbers:** the  set  of  the  numbers  ( ), where  (a) and ( b) are  integers and  (b) is not equal to (0), (b ≠ 0).

**Real number**: the set of all real numbers corresponding to points on the number line.

**Reciprocal**: a multiplicative inverse, two numbers are reciprocals if their product is (1).

**Set**:  is a collection of object that has a relation between there’s element.

**Set-builder notation:**  the meaning of asset by describing basic characteristics of the element s in the set.

**Subset**:  sets that are part of other sets.

**Substituting**:  replace a variable with a number.

**Term**:  a number, a variable, or a product or a quotient of numbers and / or variable.

**Variable**: represents an unknown value.

**Whole numbers**: the set of natural numbers and 0,

 {0, 1, 2, 3…}.

**Week 2**

**Addition Principle**: For any real numbers a, b and c.

a = b is equivalent to a + c = b + c

**Area**: The number of square unites that fill a plane region.

**Coefficient**: The numerical multiplier of a variable.

**Equivalent Equations**: Equations with the same solutions.

**Equivalent Inequality**: Inequality that have the same solution set.

**Formula**: An equation that uses numbers or letters to represent a relationship between two or more inequality.

**Multiplication Principle:**For any real numbers a, b and c, c ≠ 0, a = b is equivalent to a. c = b. c.

**Multiplicative Inverses**: Reciprocal tow numbers whose product is 1.

**Percent notation**: A representation of a number as parts per 100.

**Solution of an equation**: Any replacement for the variable that makes an equation or an inequality true.

**Solution Set**: The set of all solutions.

**Solve an equation**: Find all of its solution.

**Week 3**

**Abscissa**: The first coordinate in the order pair of numbers

**Axes**: Tow perpendicular number lines used to identify points in a plane

**Coordinates**: The numbers in an ordered pair

**Grade**: The measure of a road’s steepness

**Graph**: A picture or diagram of the data in a table; a line, curve, or collection of points that present all the solution of an equation

**Intercept**: the point at which a graph intersects the x- or y- axis

**Linear equation**:  Any equation that cab be written

 **Ordinate**: The second coordinate in the order pair of numbers

**Origin**: The point on a graph where the tow axis intersect

**Quadrants**: The four regions into which the axes divide a plane

**Rise**: The change in the second coordinate between two points on a line

**Run**: The change in the first coordinate between two points on a line

**Scientific notation**: A representation of a number of the form M (10^n), where n is an integers, 1<=M<10, and M is expressed in decimal notation

**Slope**: The ratio of the rise to the run for any tow points on a line

**Slope- intercept equation**: An equation of the form y=mx+b, where are variables; the slope is and the y-intercept is (0, b)

**X-intercept**: The point at which graph crosses the

**Y-intercept**: The point at which graph crosses the