Additive Property of Equality

The same quantity can be added to both sides of an equation.

Example: If $a = b$ then $a + c = b + c$

Angle

The space or shape made by two straight lines is an _____.

At this level, usually measured in degrees (°).

Area (A)

The surface contained within a geometric figure, measured in square units of length is the _____.

Axis

A central line around which things are arranged is an _____.

Best Fit Straight Line

A line which estimates (guesses at) the best line which characterizes the data points is the _____.

It is not the line that directly connects the points.

Circumference (c)	The line bounding a circle is the _____, the length of that line.
Coefficient	A multiplier of a variable or unknown quantity, a number written in front of a variable, as 6 in 6x is a _____.
Conversion Factor	A ratio with the value of 1 that can be used to change the name of a quantity is a _____.
Delta (Δ)	A change, positive or negative, in the value of a variable; often used to describe a change from one condition to another is a _____. Example: $\Delta x = x_2 - x_1$
Diameter	A straight line through the center of a circle from one side to the other is a _____.

Division Property of Equality	The same quantity (except zero) can be divided into both sides of an equation. Example: If a = b and ($c \neq 0$) then $\frac{a}{c} = \frac{b}{c}$ This is the _____.
Equation	A mathematical sentence stating the equality between two quantities that contains an equal sign is an _____.
Equivalent	Equal in quantity, value, or meaning,
Equivalent Quantities	Quantities defined as being equal are _____. Examples: 1 meter = 100 centimeters, 1 yard = 3 feet, 1 pound = 16 ounces, 12 inches = 1 foot.
Evaluate	To find the value or amount is to _____.

Exponential Property of Equality	Both sides of an equation can be raised to the same power and maintain the truth of equality. Example: If a = b, then $a^x = b^x$ This is the _____.
Expression	Mathematical symbol or symbols that show meaning.
Form of a Solution	A mathematical sentence is considered solved when the variable is by itself on one side of the equation with a coefficient of +1 (Often the +1 is not written), and the number or symbols that make the sentence true on the other side of the equation.
Function	A description of the relationship between numbers or groups of numbers is a _____.
Identity Element of Multiplication and Division	There exists an element 1, such that: a x 1 = a, and a ÷ 1 = a.

Identity Element of Addition and Subtraction	There exists an element 0, such that: $a + 0 = a$, and $a - 0 = a$.
Identity Property of Equality	If $a = b$ then $b = a$, is the _____.
Intersect	To meet or cross is to _____.
Inverse, Invert	To turn upside down, to reverse the order. For numbers, this is often thought of as a reciprocal. Example: The reciprocal of x is 1/x.
Inverse of Addition	Subtraction, the process of undoing addition, often used to remove numbers when solving equations is the _____. Example: $+5 - 5 = 0$.

Inverse of Division	Multiplication, a process of undoing division and often used when solving equations, is the _____.
Inverse of Exponentiation	Taking a root, often used when solving equations, is the _____. Example: $\sqrt{x^2} = x$
Inverse of Multiplication	Division, a process of undoing multiplication and often used when solving equations, is the _____.
Inverse of Subtraction	Addition, the process of undoing subtraction, often used to remove numbers when solving equations, is the _____. Example: $-5 + 5 = 0$
Length	The distance on a line between two points is a _____. Often it is measured in centimeters (cm).

Like	Having the same characteristics; equal.
Like Terms	Terms where the variable portions of the expression are alike are called _____.
Line	A thin threadlike mark, a row of things, as of number points across a page is a _____.
Magnitude	Greatness of size, importance.
Multiplicative Inverse	A reciprocal is a _____.

Multiplicative Inverse or Reciprocal

The number that gives a product of one when multiplied times another number is the _____.

Example: $\frac{1}{xy}$ is the _____ of xy.

Multiplicative Property of Equality

The same quantity can be multiplied times both sides of an equation. _____.

Example: If $a = b$, then $ac = bc$

Origin

The source; the intersection of the x-axis and the y-axis; the point (0,0) is the _____.

Percent (%)

In, to, or for every hundred is _____.

pi (π)

The symbol designating the ratio of the circumference of a circle to its diameter is _____.

$$\pi = \frac{c}{d}$$

Proportion

An equation stating the equality of two ratios is a _____.

Example: $\frac{1}{2} = \frac{2}{4}$

Quantity

A number or symbol expressing a thing that can be measured is a _____.

Radius (r)

Any straight line from the center to the circumference of a circle is a _____.

Ratio or Fraction

A comparison of two numbers by division is a_____.

Rise

Change in the vertical direction(Δy) is called the _____.

$$\Delta y = (y_2 - y_1)$$

Root

The _____ of an equation is a value for the variable that makes the equation a true statement.

Run

The change in the horizontal direction (Δx) is the _____.

$$\Delta x = (x_2 - x_1)$$

Simplify

To make simpler or less complex is to _____.

Slope (m)

$\frac{\text{rise}}{\text{run}} = \frac{\text{change in y}}{\text{change in x}} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$ where (x_1, y_1) and (x_2, y_2) are an ordered pair of coordinates, indicating points in the plane is the _____.

Slope Intercept Form of an Equation

When a linear equation is solved for y it is in the form: $y = mx + b$; m, the coefficient of x, is the slope and b is the y intercept (where the line crosses the y-axis). _____.

Solution	If a mathematical sentence contains a variable, a value for the variable that makes the sentence true is called a _____.
Solving Process	In general, for simple equations the solving process reverses the normal order of operations (PEMDAS); addition and subtraction are reversed first and multiplication or division second and dealing with exponents last. _____.
Straight	Having the same direction throughout its length, not crooked or bent is _____.
Substitute	To put in place of another is to _____.
Substitution Assumption	We will assume that if quantities are defined as equal, the number system allows us to substitute the symbols and the numbers for the quantities interchangeably.

Subtraction Property of Equality	The same quantity can be subtracted from both sides of an equation. Example: If a = b then a - c = b - c
Symbol of Proportionality (∝ or "= k")	A symbol indicating a relationship between two variables. _____.
Tangent	A line touching a curved surface at one point, but not intersecting it is a _____.
Variable	A letter or symbol that stands for a number that can be changed is a _____.
Vertex	A point where two lines or planes intersect and form an angle is a _____.

x-axis	The horizontal line on a graph, usually indicating an independent variable is the _____.
x-axis	The line y = 0 is the _____.
y-axis	The vertical line on a graph, usually indicating a dependent variable is the _____.
y-axis	The line x = 0 is the _____.
y-intercept	The point where a line crosses the y axis is the _____.

y-intercept

The value for y when x = 0 in a linear equation is the _____.

Absolute value (| |)

Value of a number without a sign _____.

Add and Subtract Fractions

The bottom numbers (denominators) of fractions must be the same to _____.

Often fractions must be changed to equivalent fractions

Example: $\frac{1}{2}+\frac{1}{3}=\frac{3}{6}+\frac{2}{6}=\frac{5}{6}$

Addition (+)

The process used to combine things or numbers is _____.

Additive Inverse

The sum of a number and its _____ is zero.

Associative Property of Addition

Changing the groupings does not change the sum of addition. _____.

Example: $a + (b + c) = (a + b) + c$.

Associative Property of Multiplication

Changing the groupings does not change the product of multiplication. _____.

Example: $a(bc) = ab(c)$.

Base

The number that is raised to an exponent.

Example: in x^3, x is a _____.

Combine

To join into one using some defined pattern or rule is to _____.

Commutative Property of Addition

The justification for changing the order of addition is the _____.

Example: $a + b = b + a$

Commutative Property of Multiplication	The justification for changing the order of multiplication is the _____. Example: abc = bca = cab = acb = bac = cba
Commute	To change, exchange or interchange is to _____.
Complex fraction	A fraction with a fraction or a mixed number in the numerator (top) or denominator (bottom) or both is a _____.
Composite number	A whole number that has factors other than 1 and itself is a _____.
Decimal Equivalent	The form of a fraction obtained by dividing a numerator by a denominator, as from a calculator is the _____.

Degree (°)

A unit of measure for angles and arcs; 1/360 of a circle is a _____.

Denominator

The term below the line in a fraction is the _____.

Distribute

To spread out is to _____.

Distributive Property of Multiplication

Multiplication spreads out over addition.

Example: $a(b + c) = ab + ac$

Divide Fractions

Invert (turn upside down) the second fraction and change the division sign to a multiplication is the process to _____.

$$\frac{\text{top}}{\text{bottom}} \div \frac{\text{top}}{\text{bottom}} = \frac{\text{top}}{\text{bottom}} \times \frac{\text{bottom}}{\text{top}}$$

$$\text{Example: } \frac{1}{5} \div \frac{2}{3} = \frac{1}{5} \times \frac{3}{2} = \frac{3}{10}$$

Dividend	The number that is divided; the part of a fraction that is above the line (numerator) is the _____.
Division (/, –, ÷, $\overline{)\ }$)	The inverse of multiplication is _____.
Divisor	The number by which a dividend is divided, The bottom number of a fraction (denominator) is the _____.
Equivalent Fractions	Ratios that have the same value but have different names (denominators) are _____.
Exponent	The number written as a superscript, that indicates how many times a number is to be multiplied times itself is an _____. In x^3, 3 is an _____. Example: $\mathbf{x^3 = x \cdot x \cdot x}$

Factors

Any of the quantities which when multiplied together form a product. In the sentence 3(5) = 15, the 3 and the 5 are _____of the product 15.

Ratio or Fraction

A comparison of two numbers by division is a _____.

Fraction Bar (–)

The line that indicates division of the top number (numerator) by the bottom number (denominator) is the _____.

Greater than sign (>)

$>$

The sign that indicates the number on the left of the sign is larger is the _____.

larger > smaller.

Improper Fraction

A fraction whose top (numerator) is larger or of higher degree than its bottom (denominator) is an _____.

Examples: $\frac{7}{2}$, or $\frac{2x^2}{3x}$

Irrational Number

A non-terminating, non-repeating decimal number; a number that cannot be expressed as a quotient of two integers is an _____.

Examples: π and $\sqrt{2}$

Larger

Going to the right on the number line, the value of the numbers get _____.

Least Common Multiple (LCM)

The smallest number that is a multiple of two numbers is the _____.

Less than sign ($<$)

$<$

The sign that indicates the number on the left of the sign is smaller is the _____.

smaller $<$ larger.

Mixed number

A number that has a part that is an integer and a part that is a fraction is a _____.

Example: $2\frac{1}{3}$

Multiplication

A number and a variable written together "5x" or variables written together "xy" means _____.

Multiply Fractions

Top times top = new top;
Bottom times bottom = new bottom,
is the process to _____.

Example: $\frac{\text{top}}{\text{bottom}} \times \frac{\text{top}}{\text{bottom}} = \frac{\text{new top}}{\text{new bottom}}$

$$\frac{2}{5} \times \frac{2}{3} = \frac{4}{15}$$

Natural number

The number 1 or any number obtained by continually adding 1 to that number is a _____.

Negative (–) numbers

Numbers less than 0, that decrease in value as the numbers get larger are _____.

-4

The opposite of +4 is _____.

Number line	Real numbers are defined by the _____.
Numerator	The part of a fraction above the division bar is the _____.
Numerical	Something involving or expressed in numbers is _____.
One	The product of a number and its multiplicative inverse is _____.
Order of Operations	The order in which operations are performed to evaluate expressions; acronym PEMDAS (parenthesis, exponents, multiplication and division, addition and subtraction). _____.

PEMDAS	**P**arenthesis, **E**xponents, **M**ultiplication, **D**ivision **A**ddition, **S**ubtraction _____.
Please Excuse My Dear Aunt Sally	Memory trick for **PEMDAS.** _____.
Positive (+) Numbers	Numbers greater than 0, increasing in size as the numbers get larger are_____.
Positive (+) Number	If no sign is written in front of a number, it is assumed to be a _____.
Prime Factors	Factors of a whole number that are prime numbers are _____. Example: _____ of 6 are 2 and 3.

Prime Number

A whole number whose only factors are 1 and itself is a _____.

Examples: 2, 3, 5, 7, 11, 13, 17, 19, 23…

Product

The result obtained when multiplying two or more numbers together is the _____.

Proper Fraction

Any number that can be written as a ratio of real numbers that “sits” between 1 and 0 and 0 and –1 is a _____.

Quotient

The quantity obtained when one number is divided by another is a _____.

Rational Number

A number that can be expressed as a ratio of two integers (whole numbers)is a _____.

Real Numbers

All the numbers on the number line including zero are _____.

Reciprocal

The quantity resulting from the division of 1 by the given quantity is a _____.

Example: The _____ of 7 is 1/7.

Reciprocal

Often a negative exponent is used to indicate a _____.

Example: $7^{-1} = \frac{1}{7},\ 7^{-2} = \frac{1}{7^2}$

Reciprocal

The product of a number and its _____ is 1.

Example: $\frac{2}{3} \times \frac{3}{2} = 1$

Smaller

Going to the left on the number line, the value of the numbers gets _____.

Subtraction

Finding the difference between things or numbers is _____.

Sometimes thinking "take away" is useful.

Undefined, division by zero is not permitted

$\frac{7}{0} =$ _____.

Zero: $\frac{0}{6} = 0$

Zero divided by any number (except zero) is _____.

Zero

The point marked 0 from which quantities are reckoned on a graduated scale is _____.

0

The sum of a number and its additive inverse is _____.

Axiom	A statement universally accepted as true is an _____.
Common	Belonging to or shared by all. _____.
Deductive Reasoning	Reasoning that uses logic based on rules and definitions to establish principles is _____.
Inductive Reasoning	Reasoning based on experimental evidence is _____.
Let	To assign (arbitrary assumption) is to _____.

Magnitude	Size, importance. _____.
Multiplication	The process of finding the quantity obtained by adding a specified quantity to itself a specified number of times is _____. Example 3(5) = 5+5+5 =15.
Multiplication	The symbols: x, $\times$, a dot "•", the parenthesis "( )", a vertical line " | "can all be used to indicate _____.
Transitive Property of Equality	Things equal to the same thing are equal to each other. _____. Example: If a = b and b = c, then a = c.
Undefined	The opposite of defined, not possible to describe exactly is _____.