

Glossary

A

absolute value - the value of a number without its sign, or the difference between a number and zero expressed as a positive number

acute angle - an angle with a measure greater than 0° and less than 90°

algebraic expression - a mathematical phrase that can contain numbers, variables, and operation symbols

angle - a geometric figure formed by two rays joined at their origins

area - the measure of the space covered by a plane shape, expressed in square units

average - a measure of center in a set of numbers; an average could be measured using a mean, median, or mode, but usually it refers to the mean

B–D

base - 1. a particular side or face of a geometric figure used to calculate area or volume; 2. a number that is raised to a power. For example, in the expression 3^4 , the base is 3.

base ten - a number system based on ten, also called *decimal system*

base unit - a metric unit of measurement that can be modified by adding a prefix to represent fractions or multiples

centi - in the metric system, the Latin prefix representing one hundredth of the base unit

circumference - the distance around the outside of a circle

coefficient - a quantity placed before and multiplying the variable in an algebraic expression

Commutative Property - a property which states that the order in which numbers are added or multiplied does not affect the result

congruent - having exactly the same size and shape

conversion factor - a ratio equal to one that is used to convert measures; also called *unit multiplier*

cube - a solid with six congruent faces that meet at right angles

deci - in the metric system, a Latin prefix representing one tenth of the base unit

decimal (fraction) - a fraction written using a decimal point and place value

decimal point - a dot used to separate whole numbers and fractions; also used to separate dollars and cents

decimal system - a number system based on ten, also called base ten

deka - or *deca*- in the metric system, the Greek prefix representing ten of the base unit

denominator - the bottom number in a fraction, which shows the number of parts in the whole

diameter - a straight line passing through the center of a circle and touching both sides

Distributive Property of Multiplication over Addition - a property for multiplying a sum by a given factor

dividend - the number being divided

divisor - a number that is being divided into another

factor - (n) a whole number that multiplies with another to form a product; (v) to find the factors of a given product

fraction - a number indicating part of a whole

geometry - a branch of mathematics that deals with figures in space

gram - the basic unit of mass in the metric system

greatest common factor (GCF) - the greatest number that will divide evenly into two or more numbers

E-G

endpoint - 1. one of the starting or ending points of a line segment; 2. another name for the origin of a ray

equation - a mathematical statement that uses an equal sign to show that two expressions have the same value

equivalent - having the same value

estimate - a close approximation of an actual value

even number - any number that can be evenly divided by two

expanded notation - a way of writing numbers by showing each digit multiplied by its place value

exponent - a raised number that indicates the number of times a factor is multiplied by itself; also called power

exponential notation - a form of expanded notation where each place value is indicated by 10 with an exponent

H-L

hecto - in the metric system, the Greek prefix representing 100 of the base unit

height - the perpendicular distance from the base to the top of a figure

improper fraction - a fraction with a numerator greater than its denominator

inverse - opposite or reverse

kilo - in the metric system, the Greek prefix representing 1,000 of the base unit

least common multiple (LCM) - the least number that is a multiple of two or more other numbers

line - in geometry, a set of connected points that extends infinitely in two directions

line segment - a section of a line bounded by two endpoints

liter - the basic unit of liquid volume in the metric system

M–O

mass - the measure of the amount of matter in an object

mean - also called *average*; a measure of center found by dividing the sum of a set of values by the number of values

median - the middle value in a list of numbers when they are arranged in order from least to greatest

meter - the basic unit of linear measure in the metric system

metric system - a system of measurement based on ten

milli - in the metric system, the Latin prefix representing one thousandth of the base unit

mixed number - a number written as a whole number and a fraction

mode - in a data set, the item that appears the most often

negative number - a number less than zero

number line - a line on which every point corresponds to a real number

numerator - the top number in a fraction, which shows the number of parts being considered

obtuse angle - a triangle in which one of the angles is greater than 90 degrees

origin - 1. another name for the endpoint of a ray; 2. on a coordinate grid, the point at the intersection of the axes, generally identified by the ordered pair (0, 0)

P–R

parallel lines - lines in the same plane that do not intersect

percent - a ratio with 100 as the second part; shown with the symbol %

perimeter - the distance around a polygon

perpendicular lines - lines that form right angles when they intersect

pi - the Greek letter π , which represents an irrational number with an approximate value of $22/7$ or 3.14

pie graph - also called *pie chart* or *circle graph*; a circular chart divided into sections that show parts of a whole amount

place value - the position of a digit which indicates its assigned value

place-value notation - a way of writing numbers that shows the place value of each digit

plane - a flat, two-dimensional surface that extends infinitely in all directions

point - a defined position in space that has no dimensions; represented with a dot

power - another name for an exponent; indicates the number of times a factor is multiplied by itself

probability - the likelihood of getting a desired outcome, given all possible outcomes

proper fraction - a fraction with a numerator less than its denominator

quadrilateral - a polygon with four sides

quadrant - one of the four sections of a Cartesian coordinate grid formed by the axes

quotient - the result when numbers are divided

radius - the distance from the center of a circle to its edge; in a regular polygon, the distance from the center to any vertex; in a sphere, the distance from the center to any point on the surface; plural is *radii*

rate - a ratio that compares quantities with different units of measure

ratio - the relationship between two values; can be written in fractional form

rational numbers - numbers that can be written as ratios or fractions, including decimals

ray - a geometric figure that starts at a definite point (called the origin) and extends infinitely in one direction

reciprocal - the number that, when multiplied by a given number, has a product of 1; multiplicative inverse

rectangle - a quadrilateral with two pairs of opposite parallel sides and four right angles

rectangular solid - a three-dimensional shape with six rectangular faces

repeating decimal - a decimal which eventually shows a repeating pattern of digits; the repeating digits can be shown under a line, called a *vinculum*

right angle - an angle measuring 90 degrees

rounding - replacing a number with another that has approximately the same value but is easier to use

“Rule of Four” - A Math-U-See method for finding the common denominator of two fractions

S–U

similar - having the same shape but a different size

simplify - to rewrite an expression as simply as possible; a simplified fraction will have a numerator and denominator with a single common factor of one

square - a quadrilateral in which the four sides are perpendicular and congruent

straight angle - an angle with a measure of 180 degrees

surface area - the sum of the areas of all the faces of a solid

symmetry - having congruent parts facing each other across an axis, with one the reverse of the other

term - a part of an algebraic expression which may be a number, a variable, or a product

unit - the place in a place-value system representing numbers less than the base

unit multiplier - a ratio equal to one that is used to convert measures; also called conversion factor

unknown - a specific quantity that has not yet been determined, usually represented by a letter

V-Z

variable - a value that is not fixed or determined, often representing a range of possible values

vertex - the endpoint shared by the two rays of an angle

volume - the number of cubic units that can be contained in a solid

whole numbers - the set of numbers that begin with zero and continue to count up by one (0, 1, 2, 3, ...)

X-axis - the horizontal number line used as a reference on a Cartesian coordinate system

Y-axis - the vertical number line used as a reference on a Cartesian coordinate system