

# Math Glossary

4th grade  
for Days 6-10

## A

**acute angle** An angle that is open less than a right angle.

**acute triangle** A triangle that has three acute angles.

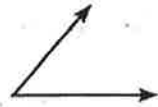
**addends** The numbers that are added together to find a sum.

Example:  $2 + 7 = 9$

  
Addends

**algorithm** A set of steps used to solve a math problem.

**angle** A figure formed by two rays that have the same endpoint.



**angle measure** The number of degrees in an angle.

**area** The number of square units needed to cover a region.

**array** A way of displaying objects in rows and columns.

### Associative Property of Addition

Addends can be regrouped and the sum remains the same.

### Associative Property of

**Multiplication** Factors can be regrouped and the product stays the same.

## B

**bar diagram** A tool used to help understand and solve word problems.

**bar graph** A graph using bars to show data.

**benchmark fraction** A known fraction that is commonly used for estimating.

Examples:  $\frac{1}{4}$ ,  $\frac{1}{3}$ ,  $\frac{1}{2}$ ,  $\frac{2}{3}$ , and  $\frac{3}{4}$ .

**billions** A period of three places to the left of the millions period.

**breaking apart** Mental math method used to rewrite a number as the sum of numbers to form an easier problem.

## C

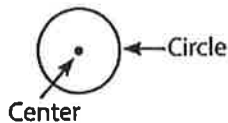
**capacity** The amount a container can hold, measured in liquid units.

**center** A point within a circle that is the same distance from all points on a circle.

**centimeter (cm)** A metric unit used to measure length. 100 centimeters = 1 meter

**century** A unit of time equal to 100 years.

**circle** A closed plane figure in which all the points are the same distance from a point called the center.



**common denominator** A number that is the denominator of two or more fractions.

**common factor** A number that is a factor of two or more given numbers.

**Commutative Property of Addition** Numbers can be added in any order and the sum remains the same.

**Commutative Property of Multiplication** Factors can be multiplied in any order and the product stays the same.

**compare** Decide if one number is greater than, less than, or equal to another number.

**compatible numbers** Numbers that are easy to compute mentally.

**compensation** Choosing numbers close to the numbers in a problem to make the computation easier, and then adjusting the answer for the numbers chosen.

**compose** To combine parts.

**composite number** A whole number greater than 1 with more than two factors.

**conjecture** Statement that is believed to be true but has not been proven.

**coordinate grid** A grid used to show ordered pairs.

**counting on** Counting up from the lesser number to the greater number to find the difference of two numbers.

**cube** A solid figure with six identical squares as its faces.

**cubic unit** The volume of a cube that measures 1 unit on each edge.

**cup (c)** A customary unit of capacity.  
1 cup = 8 fluid ounces

**customary units of measure** Units of measure that are used in the United States.



**data** Pieces of collected information.

**day** A unit of time equal to 24 hours.

**decade** A unit of time equal to 10 years.

**decimal** A number with one or more digits to the right of the decimal point.

**decimal point** A dot used to separate dollars from cents in money or to separate ones from tenths in a number.

**decimeter (dm)** A metric unit of length equal to 10 centimeters.

**decompose** To break into parts.

**degree (°)** A unit of measure for angles.  $1^\circ = \frac{1}{360}$  of a circle. Also a unit of measure for temperature.

**denominator** The number below the fraction bar in a fraction that represents the total number of equal parts in one whole.

**difference** The answer when subtracting two numbers.

**digits** The symbols used to write a number: 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

**Distributive Property** Multiplying a sum (or difference) by a number is the same as multiplying each number in the sum (or difference) by that number and adding (or subtracting) the products.  
*Example:*  $(3 \times 21) = (3 \times 20) + (3 \times 1)$

**divide** An operation to find the number in each group or the number of equal groups.

**dividend** The number to be divided.

**divisibility rules** The rules that state when a number is divisible by another number.

**divisible** Can be divided by another number without leaving a remainder.  
*Example:* 10 is divisible by 2

**divisor** The number by which another number is divided.

*Example:*  $32 \div 4 = 8$

↑  
Divisor

**dot plot** A type of line plot that uses dots to indicate the number of times a response occurred.



**elapsed time** The amount of time between the beginning of an event and the end of the event.

**equation** A number sentence that uses the equal sign (=) to show that two expressions have the same value.  
*Example:*  $9 + 3 = 12$

**equilateral triangle** A triangle with three sides that are the same length.

**equivalent** Numbers that name the same amount.

**equivalent fractions** Fractions that name the same region, part of a set, or part of a segment.

**estimate** To give an approximate value rather than an exact answer.

**expanded form** A number written as the sum of the values of its digits.  
*Example:*  $2,476 = 2,000 + 400 + 70 + 6$

**expression** A mathematical phrase.  
*Examples:*  $x - 3$  or  $2 + 7$

**F**

**fact family** A group of related facts using the same set of numbers.

**factor pairs** Numbers that when multiplied together give a certain product.

**factors** The numbers that are multiplied together to give a product.

*Example:*  $3 \times 6 = 18$

↑ ↑  
Factors

**fluid ounce (fl oz)** A customary unit of capacity. 1 fluid ounce = 2 tablespoons; 8 fluid ounces = 1 cup.

**foot (ft)** A customary unit of length. 1 foot = 12 inches.

**formula** An equation that uses symbols to relate two or more quantities.

*Example:*  $A = \ell \times w$

**fraction** A symbol, such as  $\frac{2}{3}$ ,  $\frac{5}{7}$ , or  $\frac{8}{5}$ , used to name a part of a whole, a part of a set, or a location on a number line.

**frequency** The number of times that a response occurs in a set of data.

**frequency table** A way to display data that shows how many times a response occurs in a set of data.

**G**

**gallon (gal)** A customary unit of capacity. 1 gallon = 4 quarts.

**generalize** To make a general statement.

**gram (g)** A metric unit of mass. 1,000 grams = 1 kilogram.

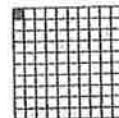
**greater than symbol (>)** A symbol that points away from a greater number or expression. *Example:*  $450 > 449$

**H**

**hexagon** A polygon with 6 sides.

**hour** A unit of time equal to 60 minutes.

**hundredth** One part of 100 equal parts of a whole.

**I**

**Identity Property of Addition** The sum of any number and zero is that number.

**Identity Property of Multiplication** The product of any number and one is that number.

**inch (in.)** A customary unit of length.  
12 inches = 1 foot

**inequality** A number sentence that uses the greater than sign ( $>$ ) or the less than sign ( $<$ ) to show that two expressions do not have the same value. *Example:*  $5 > 3$

**intersecting lines** Lines that pass through the same point.

**interval** A number which is the difference between two consecutive numbers on the scale of a graph.

**inverse operations** Operations that undo each other.  
*Examples:* Adding 6 and subtracting 6;  
Multiplying by 4 and dividing by 4.

**isosceles triangle** A triangle with at least two equal sides.

## K

**key** Part of a graph that tells what each symbol stands for.

**kilogram (kg)** A metric unit of mass equal to 1,000 grams. 1 kilogram = 1,000 grams

**kilometer (km)** A metric unit of length equal to 1,000 meters.  
1 kilometer = 1,000 meters

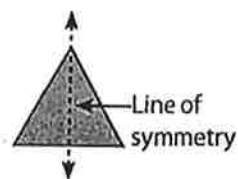
## L

**leap year** A calendar occurrence that happens every four years when an extra day is added to February. Leap years have 366 days.

**less than symbol ( $<$ )** A symbol that points towards a lesser number or expression. *Example:*  $305 < 320$

**line** A straight path of points that goes on and on in opposite directions.

**line of symmetry**  
A line on which a figure can be folded so both halves are the same.



**line plot** A way to display data along a number line, where each dot represents one number in a set of data.

**line segment** A part of a line that has two endpoints.

**line symmetric** A figure that can be folded on a line to form two halves that fit exactly on top of each other.

**liter (L)** A metric unit of capacity.  
1 liter = 1,000 milliliters

## M

**mass** The amount of matter that something contains.

**meter (m)** A metric unit of length.  
1 meter = 100 centimeters

**metric units of measure** Units of measure commonly used by scientists.

**mile (mi)** A customary unit of length.  
1 mile = 5,280 feet

**millennium (plural: millennia)** A unit for measuring time equal to 1,000 years.

**milligram (mg)** A metric unit of mass.  
1,000 milligrams = 1 gram

**milliliter (mL)** A metric unit of capacity.  
1,000 milliliters = 1 liter

**millimeter (mm)** A metric unit of length.  
1,000 millimeters = 1 meter

**millions** In a number, a period of three places to the left of the thousands period.

**minute** A unit of time equal to 60 seconds.

**mixed number** A number that has a whole number part and a fraction part.

**month** One of the 12 parts into which a year is divided.

**multiple** The product of a given whole number and any non-zero whole number.

## N

**number name** A way to write a number in words. *Example:* Four thousand, six hundred thirty-two.

**numerator** In a fraction, the number above the fraction bar that represents the part of the whole.

**numerical expression** An expression that contains numbers and at least one operation. *Example:*  $35 + 12$



**obtuse angle** An angle that is open more than a right angle but less than a straight angle.

**obtuse triangle** A triangle that has one obtuse angle.

**octagon** A polygon with 8 sides.

**ounce (oz)** A customary unit of weight.  
16 ounces = 1 pound

**outlier** Any number in a data set that is very different from the rest of the numbers.

**overestimate** An estimate that is greater than the exact answer.

# P

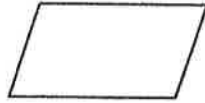
## **parallel lines**

Lines that never intersect.



## **parallelogram**

A quadrilateral that has two pairs of parallel sides.



**partial products** Products found by breaking one factor in a multiplication problem into ones, tens, hundreds, and so on and then multiplying each of these by the other factor.

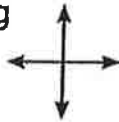
**partial quotients** A way to divide that finds quotients in parts until only a remainder, if any, is left.

**pentagon** A plane figure with 5 sides.

**perimeter** The distance around a figure.

**period** In a number, a group of three digits, separated by commas, starting from the right.

**perpendicular lines** Intersecting lines that form right angles.



**pint (pt)** A customary unit of capacity.  
1 pint = 2 cups

**place value** The value given to a place digit has in a number.

*Example:* In 3,946, the 9 is in the hundreds place. So, the 9 has a value of 900.

**point** An exact location in space.

**polygon** A closed plane figure made up of line segments.

**pound (lb)** A customary unit of weight.  
1 pound = 16 ounces

**prime number** A whole number greater than 1 that has exactly two factors, itself and 1.

**product** The answer to a multiplication problem.

**protractor** A tool used to measure and draw angles.

# Q

**quadrilateral** A polygon with 4 sides.

**quart (qt)** A customary unit of capacity.  
1 quart = 2 pints

**quotient** The answer to a division problem.

# R

**ray** A part of a line that has one endpoint and continues on forever in one direction.

**rectangle** A quadrilateral that has four right angles.

**rectangular prism** A solid figure with 6 rectangular faces.

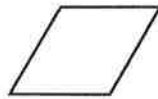
**regroup** To name a whole number in a different way. *Example:*  $32 = 2 \text{ tens } 12 \text{ ones}$

**remainder** The number that remains after the division is complete.

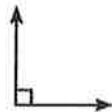
**repeated addition** A way to write a multiplication expression as an addition expression. *Example:*  $3 \times 5 = 5 + 5 + 5$

**repeating pattern** Made up of shapes or numbers that form a part that repeats.

**rhombus** A quadrilateral that has opposite sides that are parallel and all of its sides are the same length.



**right angle** An angle that forms a square corner.



**right triangle** A triangle that has one right angle.

**rounding** A process that determines which multiple of 10, 100, 1,000, and so on a number is closest to.

**rule** A mathematical phrase that tells how numbers in a table are related.

# S

**scale** Numbers that show the units used on a graph.

**scalene triangle** A triangle with no sides that are the same length.

**second** A unit of time.  $60 \text{ seconds} = 1 \text{ minute}$

**sequence** A set of numbers that follows a pattern.

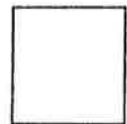
**side** Each of the line segments of a polygon.

**solid figure** A figure with three dimensions that has length, width, and height.

**solution** The value of the variable that makes an equation true.

**solve an equation** Find a solution to an equation.

**square** A quadrilateral that has four right angles and all sides are the same length.



**square unit** A square with sides one unit long used to measure area.



**standard form** A way to write a number showing only its digits. Commas separate groups of three digits starting from the right. *Example:* 613,095

**straight angle** An angle that forms a straight line.

**sum** The result of adding numbers together.

**survey** Collecting information by asking a number of people the same question and recording their answers.

## T

**tablespoon (tbsp)** A customary unit of capacity. 1 tablespoon = 3 teaspoons

**teaspoon (tsp)** A customary unit of capacity. 3 teaspoons = 1 tablespoon

**tenth** One part of 10 equal parts of a whole.



**terms** Numbers in a sequence or variables, such as  $x$  and  $y$ , in an expression.

**ton (T)** A customary unit of weight.  
1 ton = 2,000 pounds

**trapezoid** A quadrilateral with only one pair of parallel sides.



**triangle** A polygon with 3 sides.

## U

**underestimate** An estimate that is less than the exact answer.

**unit angle** An angle that cuts off  $\frac{1}{360}$  of a circle and measures  $1^\circ$ .

**unit fraction** A fraction with a numerator of 1. *Example:*  $\frac{1}{2}$

**unknown** A symbol or letter, such as  $x$ , that represents a number in an expression or equation.

## V

**variable** A symbol or letter that stands for a number.

**vertex (plural: vertices)** The point where two rays meet to form an angle.

**volume** The number of cubic units needed to fill a solid figure.

**W**

**week** A unit of time equal to 7 days.

**weight** A measure of how heavy an object is.

**whole numbers** The numbers 0, 1, 2, 3, 4, and so on.

**Y**

**yard (yd)** A customary unit of length.  
1 yard = 3 feet

**year** A unit of time equal to 365 days or 52 weeks or 12 months.

**Z**

**Zero Property of Multiplication** The product of any number and zero is zero.  
*Examples:*  $3 \times 0 = 0$ ;  $5 \times 0 = 0$