

Glossary

A

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

acute triangle A triangle that has three acute angles.

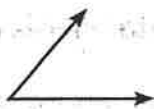
addends The numbers that are added together to find a sum.

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

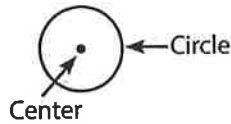
capacity The amount a container can hold, measured in liquid units.

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

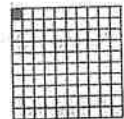
greater than symbol (>) A symbol that points away from a greater number or expression. *Example:* $450 > 449$

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

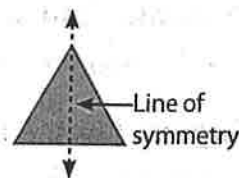
L

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.

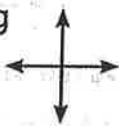
partial quotients A way to divide that finds quotients in parts until only a remainder, if any, is left.

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 a 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.

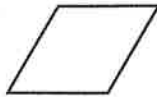
regroup To name a whole number in a different way. *Example:* $32 = 2 \text{ tens } 12 \text{ ones}$

remainder The number that remains after the division is complete.

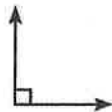
repeated addition A way to write a multiplication expression as an addition expression. *Example:* $3 \times 5 = 5 + 5 + 5$

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 seconds = 1 minute

sequence A set of numbers that follows a pattern.

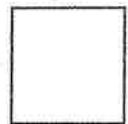
side Each of the line segments of a polygon.

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

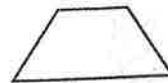
tenth One part of 10 equal parts of a whole.



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° .

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: $3 \times 0 = 0$; $5 \times 0 = 0$