

Mrs. Melton's Math Dictionary

expanded form

A way to write numbers by showing the value of each [digit](#)

Example:

$$241 = 200 + 40 + 1$$

standard form

A way to write numbers by using the [digits](#) 0-9

Example:

2,394

word form

A way to write numbers by using words

Example:

two-hundred fifty-seven

place value

Place value determines the value of a [digit](#) in a number, based on the location of the digit.

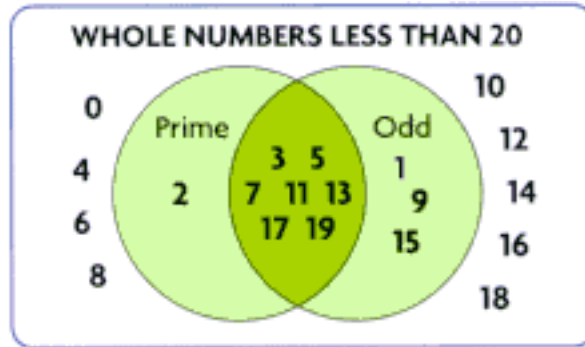
Example:

	PLACE VALUE									
	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths
1,623,051 →	1	6	2	3	0	5	1			
0.053 →							0	0	5	3
32.4 →						3	2	4		

Venn diagram

A diagram that shows relationships among sets of things

Example:

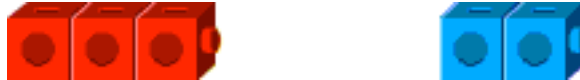


digit

Any one of the ten symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 used to write numbers

add

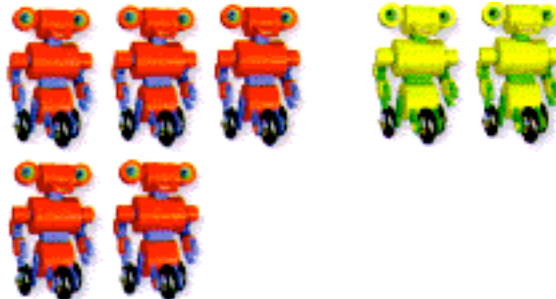
To join 2 groups.



$$3 + 2 = 5$$

addend

Any of the numbers that are added



$$\begin{array}{c} 5 + 2 = 7 \\ \uparrow \quad \uparrow \\ \text{addend} \quad \text{addend} \end{array}$$

sum

The answer to an [addition](#) problem

Example:

$$12 + 7 = 19$$

The sum is 19.

subtraction

The process of finding how many are left when a number of items are taken away from a group of items; the process of finding the difference when two groups are compared; the opposite operation of [addition](#)

Example:



$$6 - 2 = 4$$

difference

The answer in a [subtraction](#) problem

Example:

$$8 - 3 = 5$$

5 is the difference

multiply

When you combine equal groups, you can multiply to find how many in all; See [multiplication](#)

product

The answer to a [multiplication](#) problem

Example:

$$6 \times 2 = 12$$

The product is 12.

divide

To separate into equal groups

Example:



quotient

The number, not including the [remainder](#), that results from [dividing](#)

Example:

$$35 \div 5 = 7 \quad 5 \overline{)35}^7$$

The quotient is 7.

factor

A number that is [multiplied](#) by another number to find a [product](#)

Examples:

$$4 \times 7 = 28$$

$$\begin{array}{r} 4 \\ \times 7 \\ \hline 28 \end{array}$$

The factors are 4 and 7.

fact family

A set of related [addition](#) and [subtraction](#) or [multiplication](#) and [division](#) number sentences

Examples:

$$2 + 4 = 6 \qquad 6 - 4 = 2$$

$$4 + 2 = 6 \qquad 6 - 2 = 4$$

or

$$3 \times 6 = 18 \qquad 18 \div 6 = 3$$

$$6 \times 3 = 18 \qquad 18 \div 3 = 6$$

estimate

To find about how many or how much

estimate

A number close to an exact amount

less than (<)

A symbol used to [compare](#) two numbers, with the lesser number given first

Example:

$$6 < 8$$

6 is less than 8.

greater than (>)

A symbol used to [compare](#) two numbers, with the greater number given first

Example:

$$8 > 6$$

8 is greater than 6.

equal sign (=)

A symbol used to show that two amounts have the same value

Example:

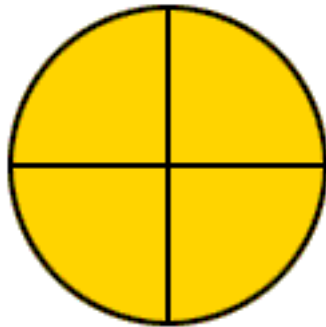
$$384 = 384$$

equals

$$4 + 1 = 5$$



equal parts



This figure has 4 **equal parts**.

dollar

1 dollar = 100 pennies



One dollar



\$1.00

multiple

The product of a given whole number and another whole number

Example:

$$\begin{array}{r} 10 \\ \times 1 \\ \hline 10 \end{array} \quad \begin{array}{r} 10 \\ \times 2 \\ \hline 20 \end{array} \quad \begin{array}{r} 10 \\ \times 3 \\ \hline 30 \end{array} \quad \begin{array}{r} 10 \\ \times 4 \\ \hline 40 \end{array} \quad \leftarrow \text{multiples of 10}$$

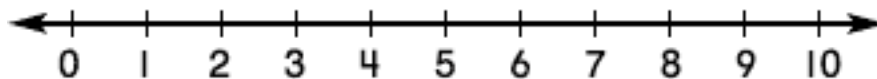
array

An arrangement of objects in rows and columns

Example:



skip-count



divisor

The number that divides the dividend

Examples:

$$18 \div 3 = 6 \quad 3 \overline{)18}^6$$

The divisor is 3.

dividend

The number that is to be divided in a division problem

Examples:

$$35 \div 5 = 7 \quad 5 \overline{)35}^7$$

The dividend is 35.

division

The process of sharing a number of items to find how many groups can be made or how many items will be in each group; the opposite operation of multiplication

Example:



$$6 \div 3 = 2$$

remainder

The amount left over when a number cannot be divided equally

Example:

$$\begin{array}{r} 3 \text{ r}4 \leftarrow \text{remainder} \\ 5 \overline{)19} \\ \underline{15} \\ 4 \end{array}$$

pattern



2, 4, 6, 8, 10

parentheses

The symbols used to show which operation or operations in an [expression](#) should be done first

Example:

$$(12 + 4) - 3$$

numerator

The number above the bar in a [fraction](#). It tells how many of the equal parts of the whole or group are being considered.

Example:

$$\frac{3}{4} \leftarrow \text{numerator}$$

denominator

The number below the bar in a [fraction](#). It tells the total number of equal parts or groups into which the whole or group has been [divided](#).

Example:

$$\frac{3}{4} \leftarrow \text{denominator}$$

equivalent

Two or more sets that name the same amount are equivalent

Examples:



4 pennies = 4 pennies



2 nickels = 1 dime

mixed number

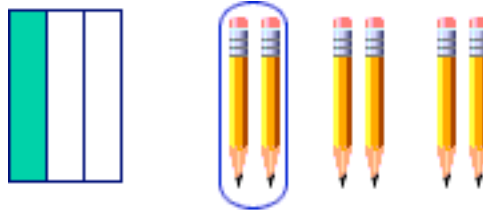
A number represented by a [whole number](#) and a [fraction](#)

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

fraction

A number that names part of a whole or part of a group

Examples:



$\frac{1}{3}$

$\frac{1}{3}$

$\frac{1}{3}$ is a fraction.

whole number

One of the numbers 0, 1, 2, 3, 4, and so on. The set of whole numbers goes on without end.

evaluate

To find the value of a numerical or algebraic [expression](#)

Example:

Find $4 \times d$ if $d = 6$.

4×6 ← Replace d with 6.

↓

24

customary measurement system

A measurement system that measures [length](#) in inches, feet, yards, and miles; [capacity](#) in cups, pints, quarts, and gallons; [weight](#) in ounces, pounds, and tons; and temperature in [degrees Fahrenheit](#)

linear units

Units which measure length, width, height, or distance

Example:

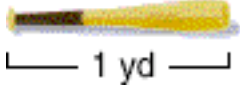
An [inch](#) is about the length of your thumb from the first knuckle to the tip.



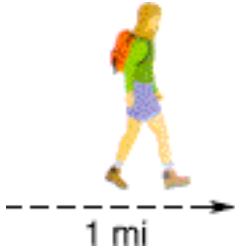
A [foot](#) is about the height of a cat.



A [yard](#) is about the length of a baseball bat.



A [mile](#) is about the distance you can walk in 20 minutes.



hour (hr)

A unit used to measure [time](#)

minute (min)

A unit used to measure short amounts of time.

Example:

There are sixty minutes in one [hour](#).

seconds (sec)

A small unit of [time](#)

60 seconds = 1 minute

month



This month is April.

quarter

1 quarter = 25 pennies

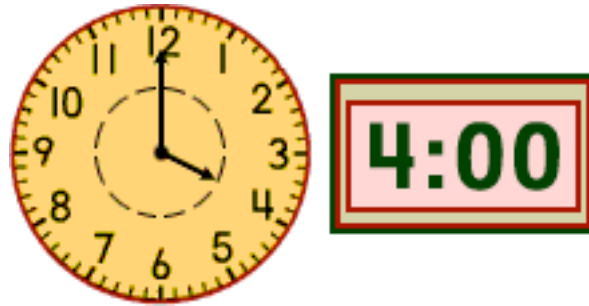


25¢



25 cents

half hour



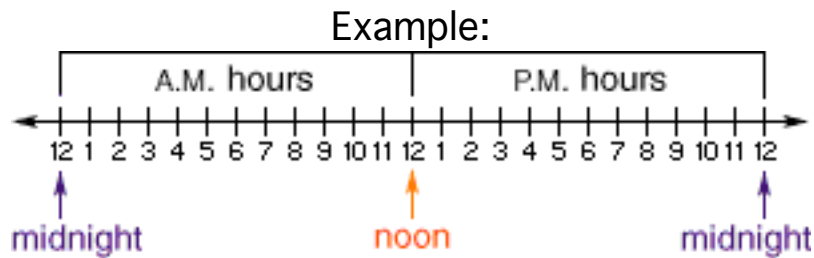
There are 30 minutes in a half hour.

A.M.



P.M.

Between noon and midnight



elapsed time----- The amount of time that passes from the start of an activity to the end of that activity.

analog clock

A device for measuring [time](#) by moving hands around a circle for showing hours, minutes, and sometimes seconds

digital clock

A clock that shows [time](#) to the minute using [digits](#)

inch (in.)

A [customary](#) unit for measuring length
12 inches = 1 foot

foot (ft)

A [customary](#) unit for measuring length or distance
12 inches = 1 foot

mile (mi)

A [customary](#) unit for measuring length and distance
5,280 feet = 1 mile

centimeter

A [metric](#) unit for measuring length
100 centimeters = 1 meter

meter (m)

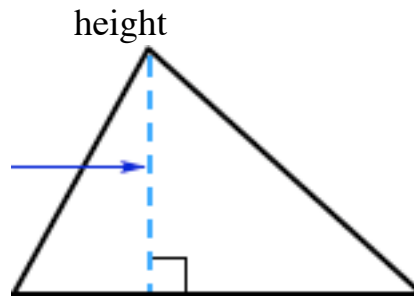
A [metric](#) unit for measuring length and distance
100 centimeters = 1 meter

kilometer (km)

A metric unit for measuring length and distance
1,000 meters = 1 kilometer
height

The length of a perpendicular from the base to the top of a plane figure or solid figure

Example:

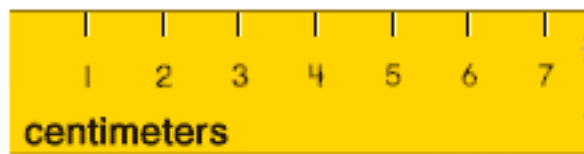


ruler

inch ruler



centimeter ruler



SYMBOLS

< is less than

> is greater than

= is equal to

°F degrees Fahrenheit

°C degrees Celsius

MONEY

1 penny = 1 cent (ϕ)

1 nickel = 5 cents

1 dime = 10 cents

1 quarter = 25 cents

1 half dollar = 50 cents

1 dollar (\$) = 100 cents

TIME

1 minute (min) = 60 seconds (sec)

1 hour (hr) = 60 minutes

1 day = 24 hours

1 week (wk) = 7 days

1 year (yr) = 12 months (mo),

or 52 weeks,

or 365 days

CUSTOMARY UNITS

Length

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet, or 36 inches

1 mile (mi) = 1,760 yards, or 5,280 feet

Weight

1 pound (lb) = 16 ounces (oz)

Capacity

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints

1 gallon (gal) = 4 quarts

METRIC UNITS

Length

1 centimeter (cm) = 10 millimeters (mm)

1 decimeter (dm) = 10 centimeters

1 meter (m) = 100 centimeters

1 kilometer (km) = 1,000 meters

Weight

1 kilogram (kg) = 1,000 grams (g)

Capacity

1 liter (L) = 1,000 milliliters (mL)

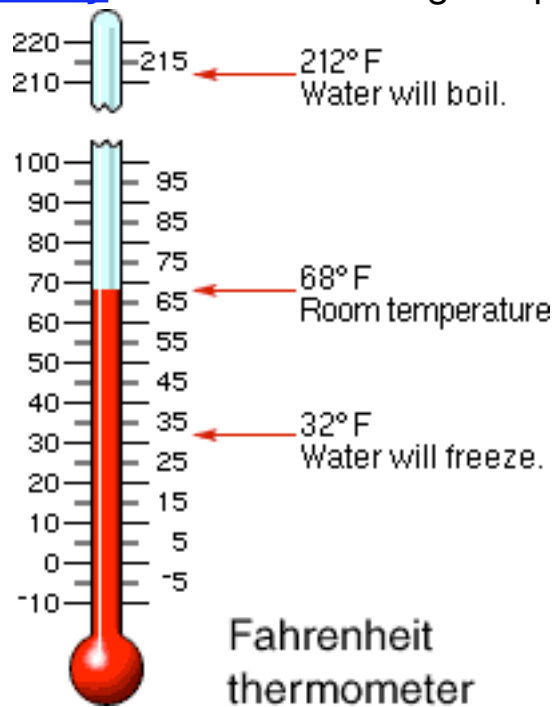
yard (yd)

A customary unit for measuring length or distance

1 yard = 3 feet

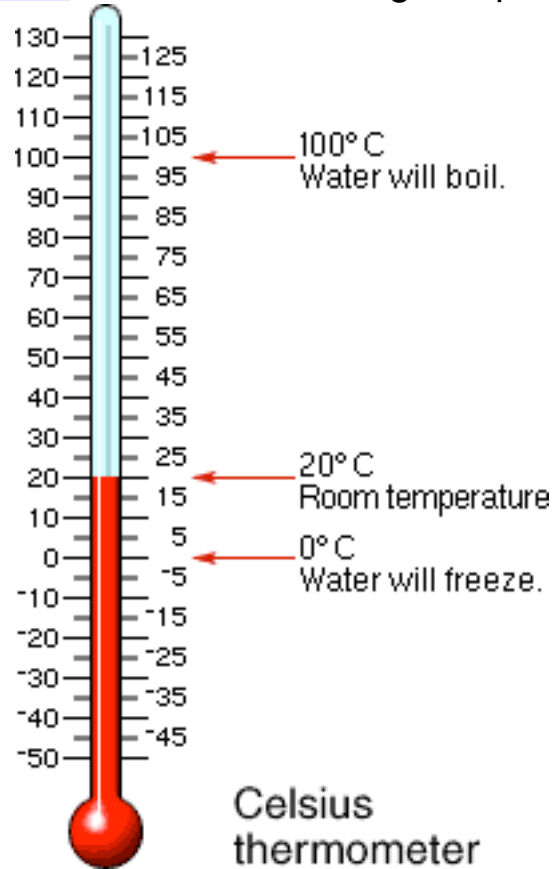
degree Fahrenheit (°F)

A customary unit for measuring temperature



degree Celsius (°C)

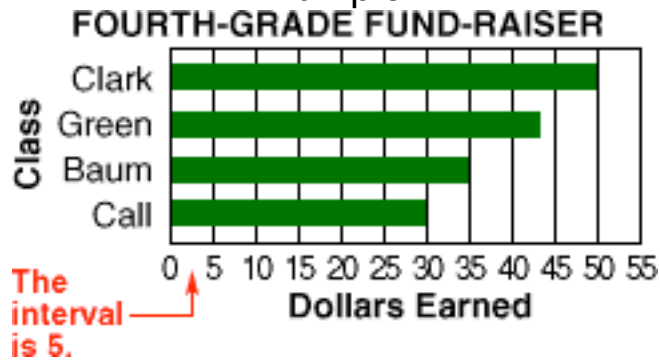
A [metric](#) unit for measuring temperature



interval

The distance between two numbers on the [scale](#) of a graph

Example:



cup

A customary unit used to measure capacity

Example:



$$2 \text{ cups} = 1 \text{ pint}$$

pint (pt)

A customary unit for measuring capacity

Example:

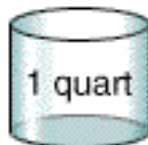


$$2 \text{ cups} = 1 \text{ pint}$$

quart

A customary unit for measuring capacity

Example:

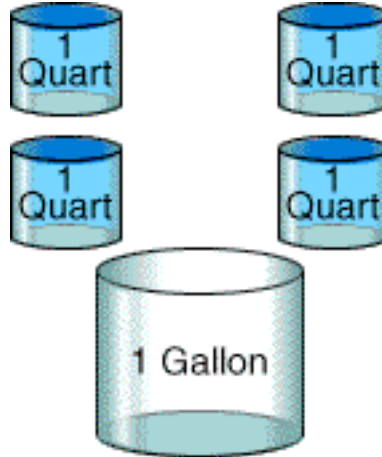


$$2 \text{ pints} = 1 \text{ quart}$$

gallon (gal)

A customary unit for measuring capacity

Example:



4 quarts = 1 gallon

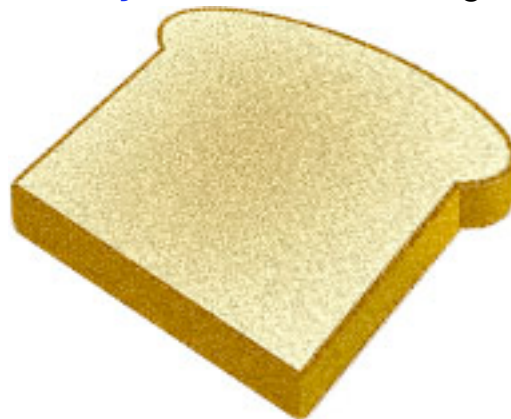
liter (L)

A metric unit for measuring capacity

1,000 milliliters = 1 liter

ounce (oz)

A customary unit for measuring weight



A slice of bread weighs about one ounce.

pound (lb)

A [customary](#) unit for measuring weight



A loaf of bread weighs about one pound.

gram

A [metric](#) unit for measuring [mass](#)



A paper clip has a mass of about one gram.

kilogram (kg)

A [metric](#) unit for measuring [mass](#)

1,000 grams = 1 kilogram

congruent figures

Figures that have the same size and shape

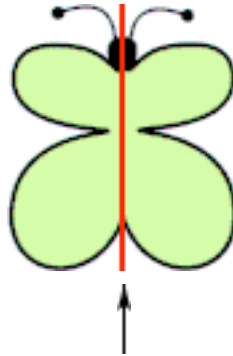
Example:



symmetry

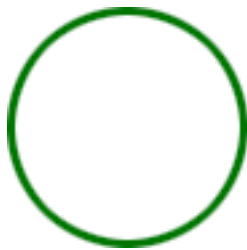
When one half of a figure looks like the mirror image of the other half

Example:



line of symmetry

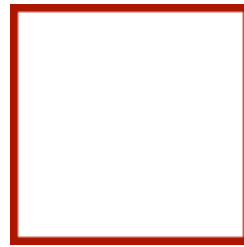
shapes



circle



rectangle



square

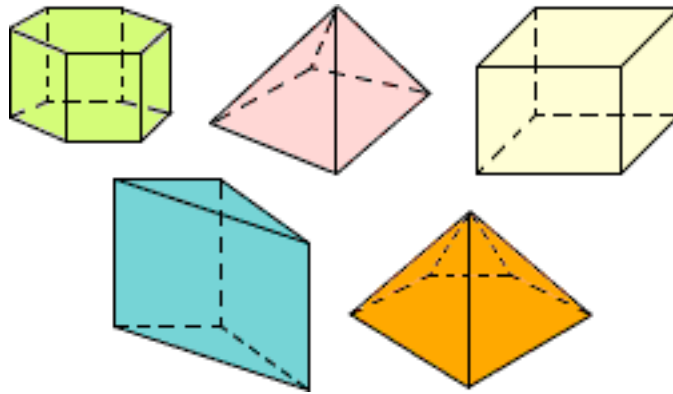


triangle

polyhedron

A solid figure with flat faces that are polygons

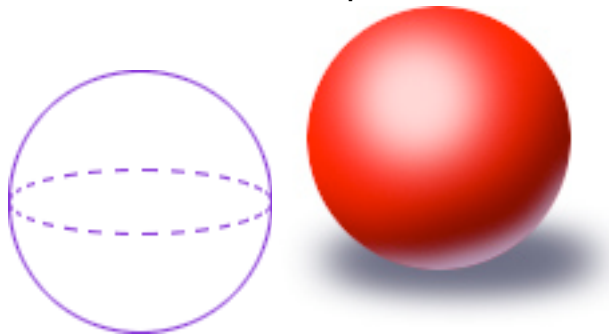
Examples:



sphere

A solid figure that has the shape of a round ball; all points are the same distance from the center

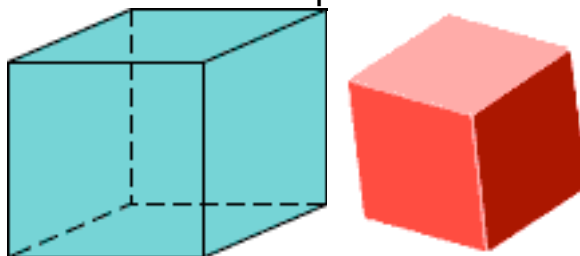
Example:



cube

A solid figure with six congruent square faces

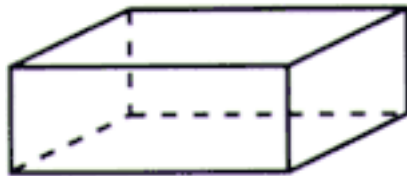
Examples:



prism

A solid figure that has two congruent, polygon-shaped bases, and other faces that are all rectangles

Examples:



rectangular prism

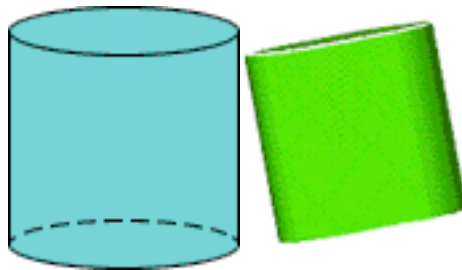


triangular prism

cylinder

A solid figure that has two parallel bases that are congruent circles

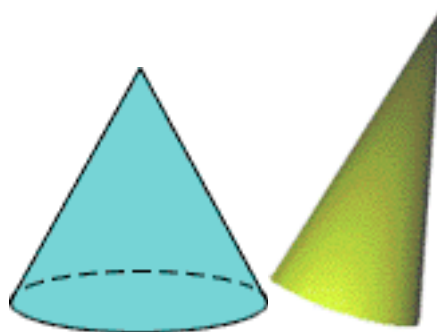
Examples:



cone

A solid figure that has a circular base and one vertex

Examples:



line

A straight path extending in both directions with no endpoints

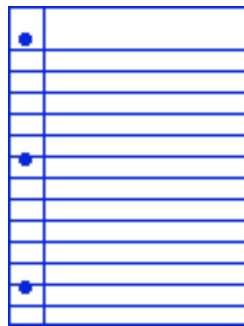
Example:



plane

A flat surface that goes on and on in all directions

Example:



part of a plane

plane figure

A figure in a [plane](#) that is formed by lines that are curved, straight, or both.

Example:

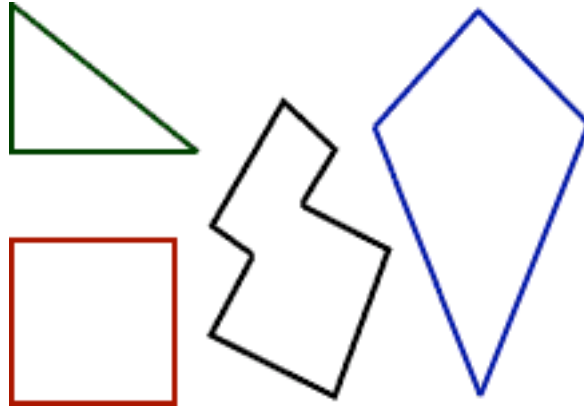


polygon

A [closed](#) plane figure with straight lines

Each side is a [line segment](#).

Example:



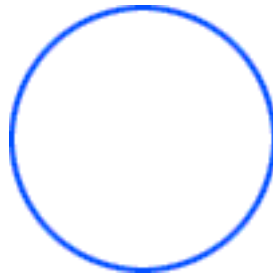
triangle

A [polygon](#) with three sides

Examples:



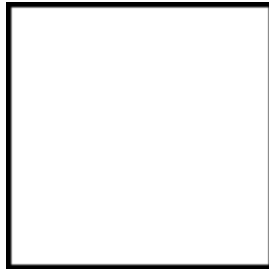
circle



square

A quadrilateral with two pairs of parallel sides, four equal sides, and four right angles

Example:



rectangle

A quadrilateral with two pairs of parallel sides, two pairs of equal sides, and four right angles

Example:



trapezoid

A quadrilateral with one pair of parallel sides

Examples:



parallelogram

A quadrilateral with two pairs of parallel sides and two pairs of equal sides

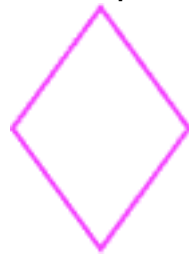
Examples:



rhombus

A quadrilateral with two pairs of parallel sides and four equal sides

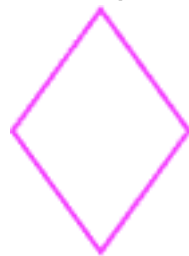
Example:



rhombus

A quadrilateral with two pairs of parallel sides and four equal sides

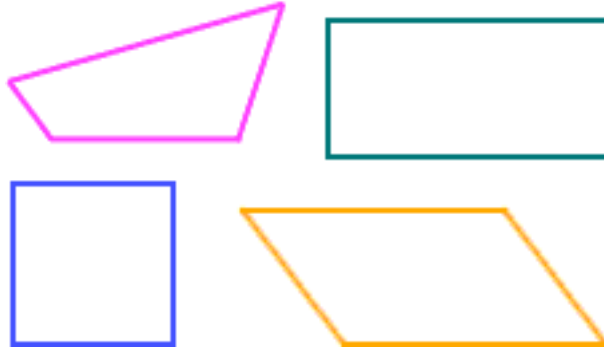
Example:



quadrilateral

A polygon with four sides

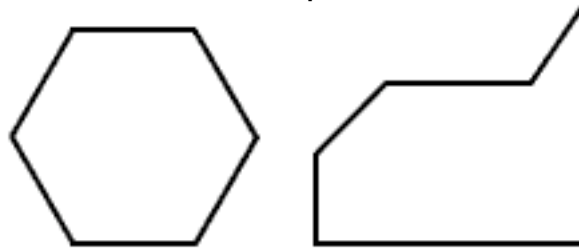
Examples:



hexagon

A polygon with six sides and six angles

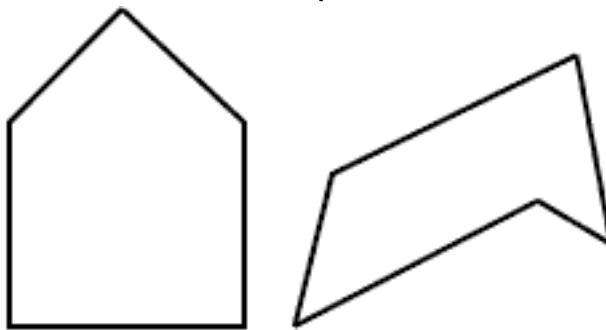
Examples:



pentagon

A polygon with five sides

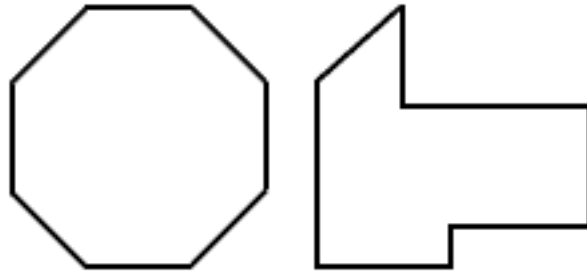
Examples:



octagon

A polygon with eight sides

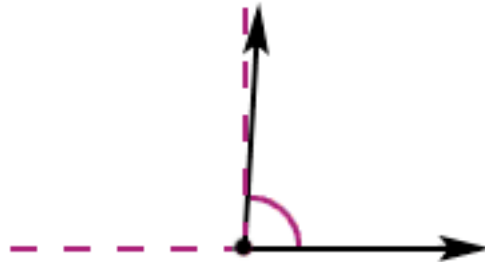
Examples:



acute angle

An [angle](#) that has a measure less than a [right angle](#)

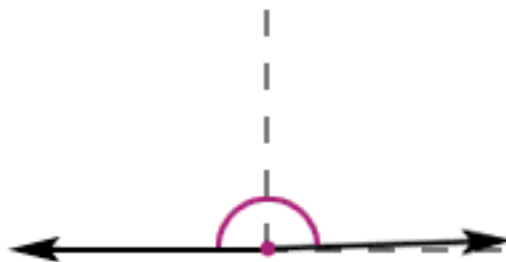
Example:



obtuse angle

An [angle](#) that has a measure greater than a [right angle](#)

Example:



right angle

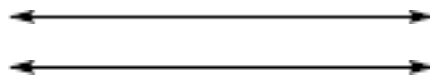
An [angle](#) that forms a square corner

Example:



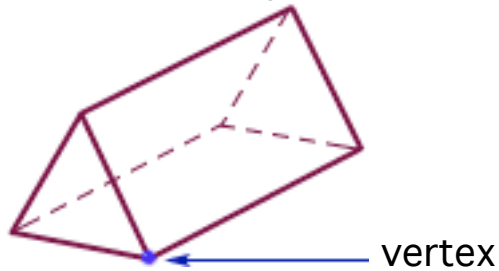
parallel lines

Lines that never cross and are always the same distance apart
Example:



vertex

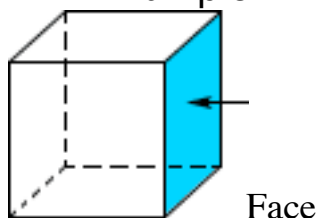
In a solid figure, a corner where three or more edges meet
Example:



face

A flat surface of a solid figure

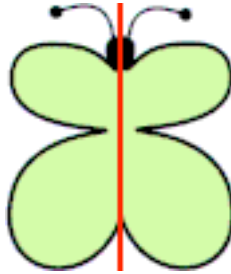
Example:



line of symmetry

An imaginary line that divides a figure into two congruent parts

Example:



ray

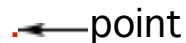
A part of a line, with one endpoint, that continues without end in one direction

Example:



point

An exact position or location

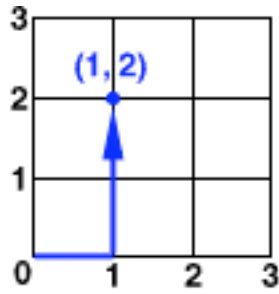


ordered pair

A pair of numbers used to locate a point on a grid. The first number tells the left-right position and the second number tells the up-down position.

Example:

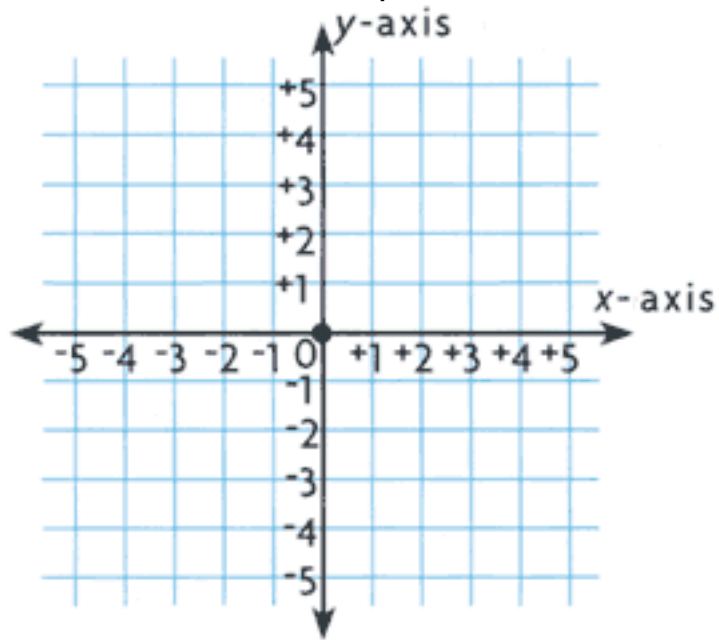
(1,2) represents 1 space to the right of zero and 2 spaces up.



axis

The horizontal or vertical number line used in a [coordinate plane](#); the line at the side or bottom of a graph

Example:



circle graph

A graph in the shape of a [circle](#) that shows [data](#) as a whole made up of different parts

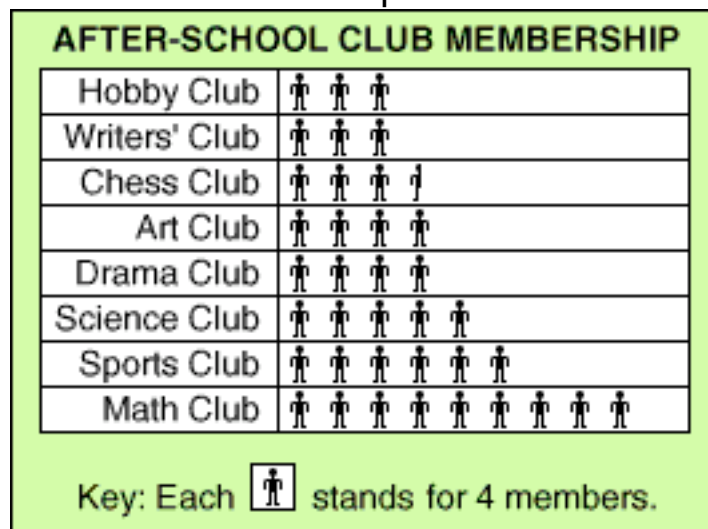
Example:



pictograph

A graph that uses pictures to show and compare information

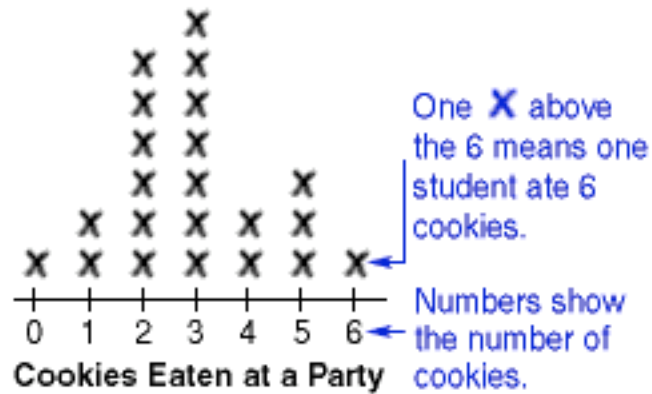
Example:



line plot

A graph that shows the [frequency](#) of [data](#) along a [number line](#)

Example:



tally table

A table that uses tally marks to record data

Example:

Favorite Sandwiches

Peanut Butter & Jelly



Grilled Cheese



Tuna Fish



Ham & Cheese



survey

A method of gathering information

number sentence

A sentence that includes numbers, operation symbols, and a greater than or less than symbol or an equal sign

Example:

$$5 + 3 = 8$$

