

Vocabulary Cards and Word Walls

Revised: May 25, 2011

Important Notes for Teachers:

- The vocabulary cards in this file match the Common Core, the math curriculum adopted by the Utah State Board of Education, August 2010.
- The cards are arranged alphabetically.
- Each card has three sections.
 - Section 1 is only the word. This is to be used as a visual aid in spelling and pronunciation. It is also used when students are writing their own “kid-friendly” definition and drawing their own graphic.
 - Section 2 has the word and a graphic. This graphic is available to be used as a model by the teacher.
 - Section 3 has the word, a graphic, and a definition. This is to be used for the Word Wall in the classroom. For more information on using a Word Wall for Daily Review – see “Vocabulary – Word Wall Ideas” on this website.
- These cards are designed to help all students with math content vocabulary, including ELL, Gifted and Talented, Special Education, and Regular Education students.

For possible additions or corrections to the vocabulary cards, please contact the Granite School District Math Department at 385-646-4239.

Bibliography of Definition Sources:

Algebra to Go, Great Source, 2000. ISBN 0-669-46151-8

Math on Call, Great Source, 2004. ISBN-13: 978-0-669-50819-2

Math at Hand, Great Source, 1999. ISBN 0-669-46922

Math to Know, Great Source, 2000. ISBN 0-669-47153-4

Illustrated Dictionary of Math, Usborne Publishing Ltd., 2003. ISBN 0-7945-0662-3

Math Dictionary, Eula Ewing Monroe, Boyds Mills Press, 2006. ISBN-13: 978-1-59078-413-6

Student Reference Books, Everyday Mathematics, 2007.

Houghton-Mifflin eGlossary, <http://www.eduplace.com>

Interactive Math Dictionary, <http://www.amathsdictionaryforkids.com/>

magnitude

magnitude

Example: If this man owes \$75 on a bill, that is -\$75. The magnitude of his debt is described as:

$$|-\$75| = \$75$$



magnitude

Example: If this man owes \$75 on a bill, that is -\$75. The magnitude of his debt is described as:

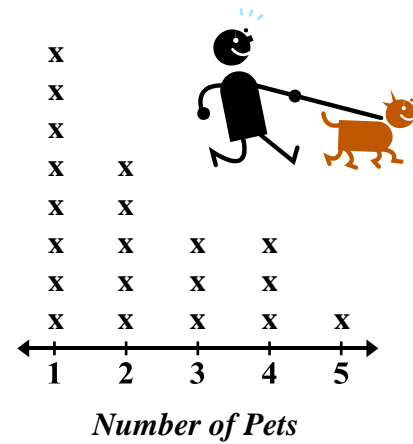
$$|-\$75| = \$75$$



Size; a property by which something can be compared as larger or smaller than other objects of the same kind.

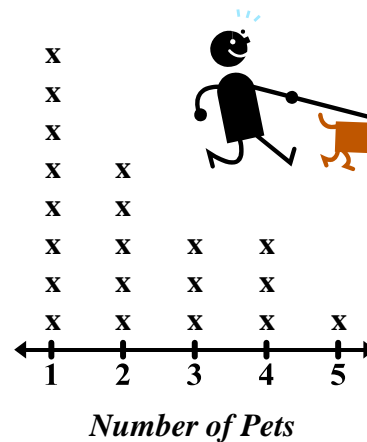
maximum

maximum



The maximum is 5.

maximum



The maximum is 5.

The largest amount; the greatest number in a data set.

mean

mean

Data Set: 14, 21, 27, 33, 45, 46, 52

Step 1:

$$14 + 21 + 27 + 33 + 45 + 46 + 52 = 238$$

Step 2:

$$238 \div 7 = 34 \leftarrow \text{mean}$$

mean

Data Set: 14, 21, 27, 33, 45, 46, 52

Step 1:

$$14 + 21 + 27 + 33 + 45 + 46 + 52 = 238$$

Step 2:

$$238 \div 7 = 34 \leftarrow \text{mean}$$

The sum of a set of numbers divided by the number of elements in the set. (A type of average)

mean absolute deviation

mean absolute deviation



The weights of the three people are 56 Kgs, 78 Kgs, and 88 Kgs.

Step 1: Find the mean. $(56+78+88)/3 = 74$

Step 2: Determine the deviation of each variable from the mean.

$$56 - 74 = -18$$

$$78 - 74 = 4$$

$$90 - 74 = 16$$

Step 3: Make the deviation 'absolute' by squaring and determining the roots. (eliminate the negative)

$(18 + 4 + 16)/3 = 12.67$ is the mean absolute deviation.

mean absolute deviation



The weights of the three people are 56 Kgs, 78 Kgs, and 88 Kgs.

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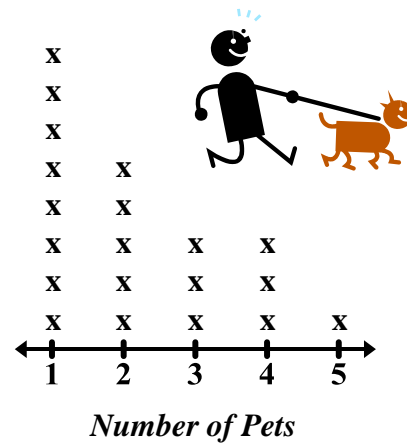
Step 3: Make the deviation 'absolute' by squaring and determining the roots. (eliminate the negative)

$(18 + 4 + 16)/3 = 12.67$ is the mean absolute deviation.

In statistics, the absolute deviation of an element of a data set is the absolute difference between that element and a given point.

measure of center

measure of center



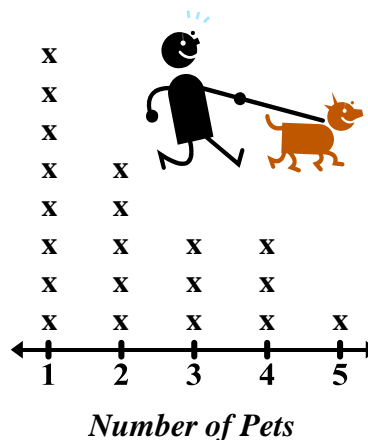
Examples:

Mode = 1

Median = 2

Mean = 2.3

measure of center



Examples:

Mode = 1

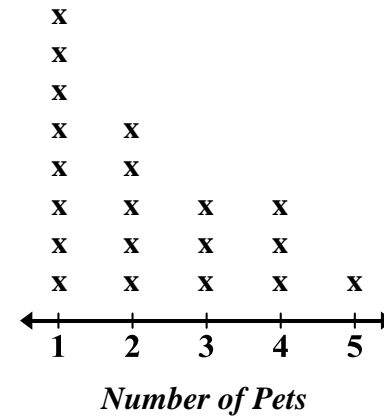
Median = 2

Mean = 2.3

An average; a single value that is used to represent a collection of data. Three commonly used types of averages are mode, median, and mean. (Also called measures of central tendency or measures of average.)

measure of variation

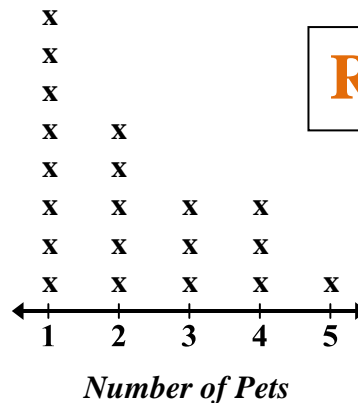
measure of variation



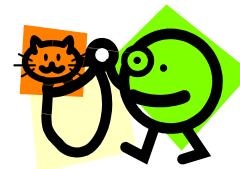
Range = 4



measure of variation



Range = 4



A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (Also known as spread or dispersion.)

median

median

14, 21, 27, **33**, 45, 46, 52



median

median

14, 21, 27, **33**, 45, 46, 52



median

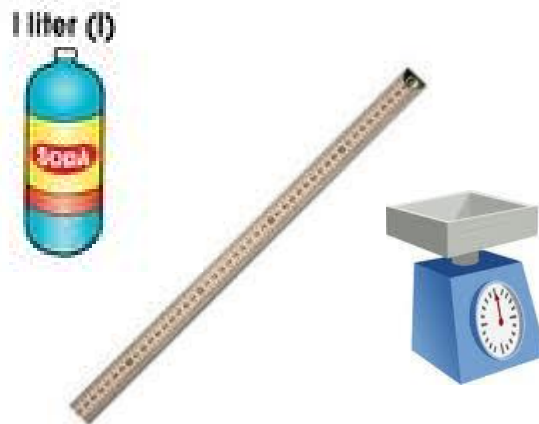
The middle number of a set of numbers when the numbers are arranged from least to greatest, or the mean of two middle numbers when the set has two middle numbers.

metric system

metric
system



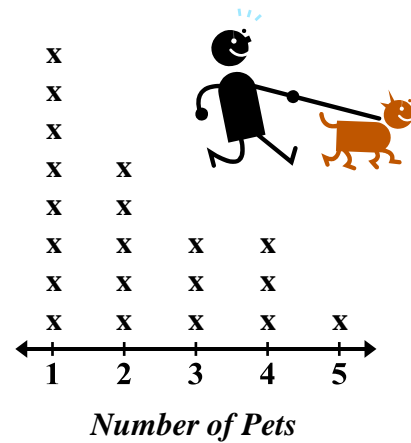
metric
system



A system of measurement based on tens. The basic unit of capacity is the liter. The basic unit of length is the meter. The basic unit of mass is the gram.

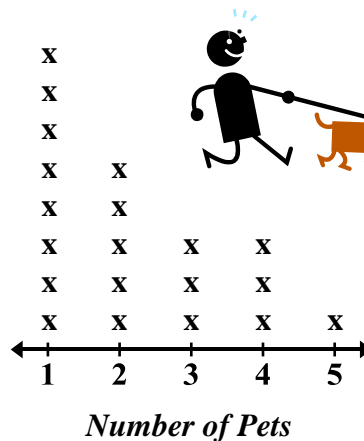
minimum

minimum



The minimum is 1.

minimum



The minimum is 1.

The smallest amount; the smallest number in a data set.

minuend

minuend

$$43.2 - 27.9 = 15.3$$

minuend

minuend

$$43.2 - 27.9 = 15.3$$

minuend

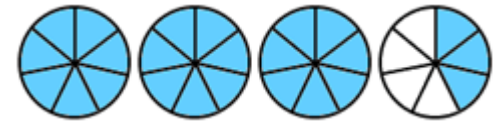
In subtraction, the minuend is the number you subtract from.

mixed number

mixed
number

Example:

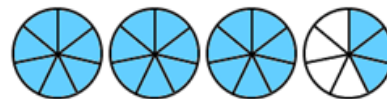
$$3\frac{3}{7}$$



mixed
number

Example:

$$3\frac{3}{7}$$



A number with an
integer and a fraction
part.

multiple

Example:

multiple

Multiples of 

7, 14, 21, 28, 35, 42, 49...

Example:

multiple

Multiples of 

The product of a whole number and any other whole number.

7, 14, 21, 28, 35, 42, 49...

Multiplicative Identity Property of 1

Multiplicative
Identity
Property of 1

$$a \times 1 = 1 \times a = a$$

Multiplicative
Identity
Property of 1

$$a \times 1 = 1 \times a = a$$

The product of any
number and 1 is
equal to the original
number.

multiplicative inverses

**multiplicative
inverses**

$$5 \times \frac{1}{5} = 1$$

**multiplicative
inverses**

**multiplicative
inverses**

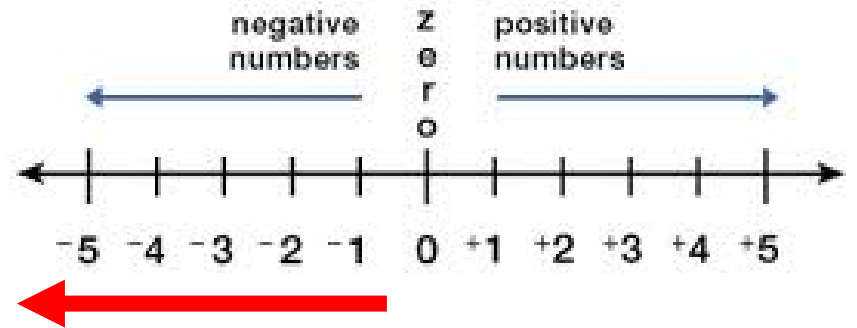
$$5 \times \frac{1}{5} = 1$$

**multiplicative
inverses**

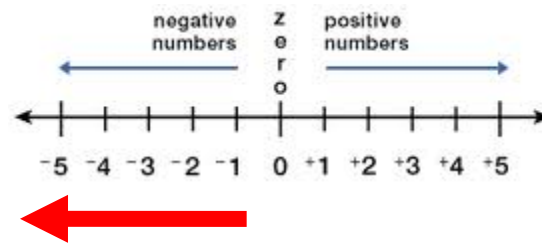
Two numbers whose product is 1. Also called reciprocals.

negative numbers

negative
numbers



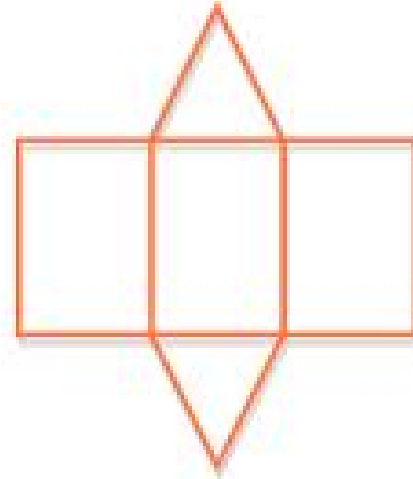
negative
numbers



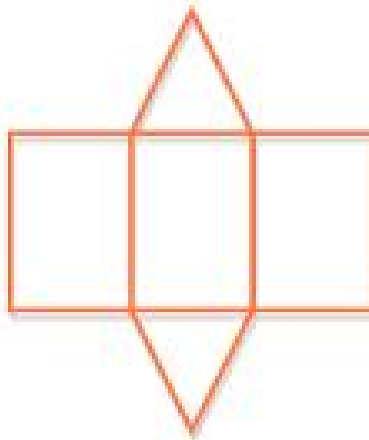
Numbers less than 0.

net

net



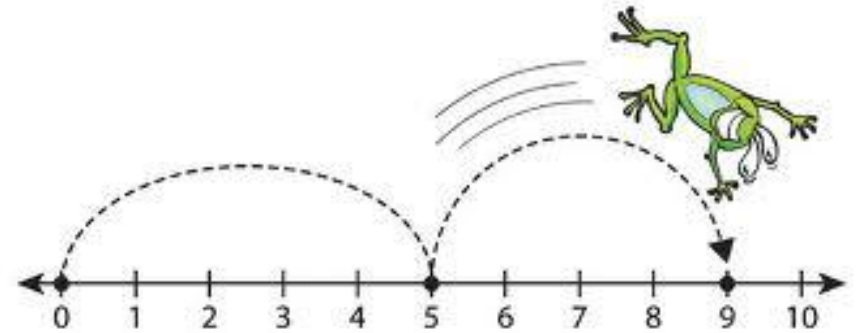
net



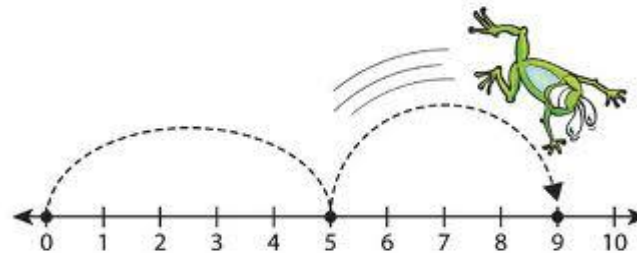
A 2-dimensional shape that can be folded into a 3-dimensional figure is a net of that figure. (Also called a network.)

number line

number
line



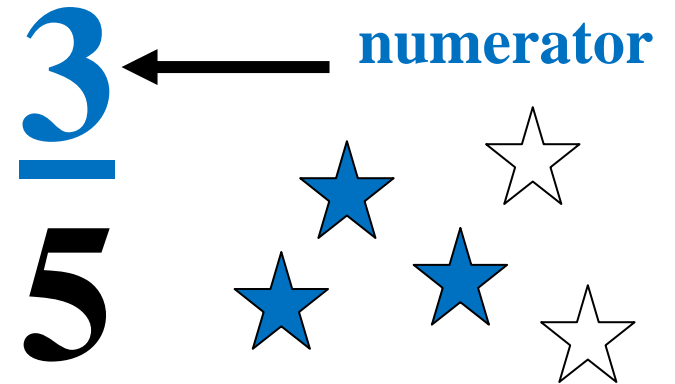
number
line



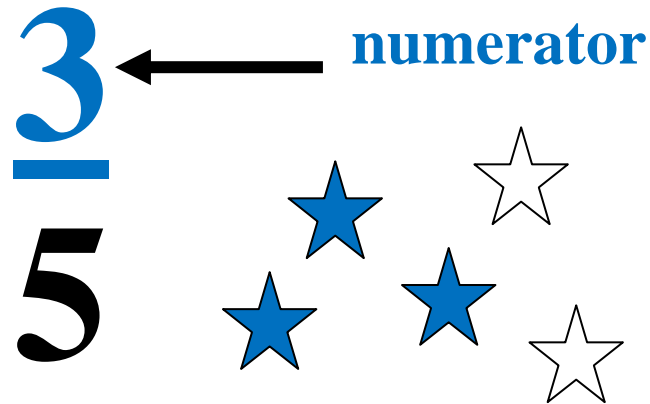
A diagram that
represents numbers
as points on a line.

numerator

numerator



numerator



The number or expression written above the line in a fraction.

numerical expression

numerical expression

$$5 + 9$$

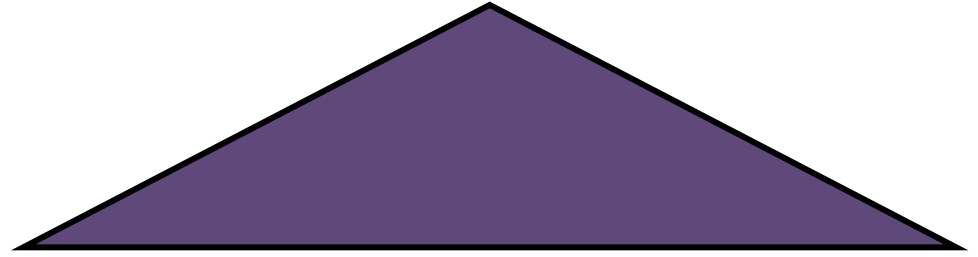
numerical expression

$$5 + 9$$

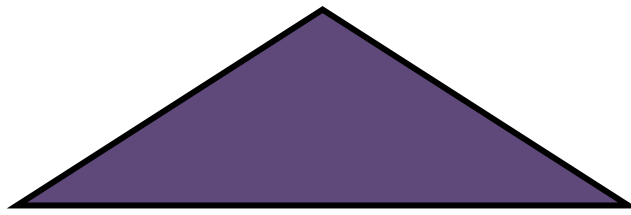
A mathematical
statement including
numbers and
operations.

obtuse triangle

obtuse
triangle



obtuse
triangle

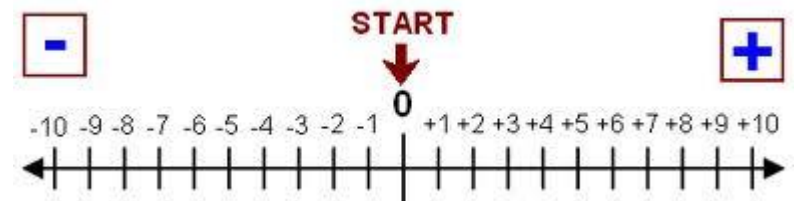


A triangle that contains one angle with a measure greater than 90° (obtuse angle) and two acute angles.

opposite

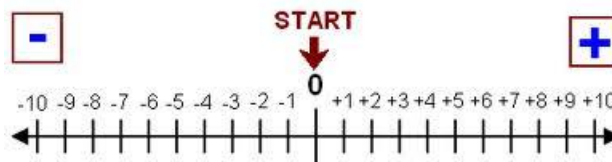
+3 and -3 are opposites.

opposite



+3 and -3 are opposites.

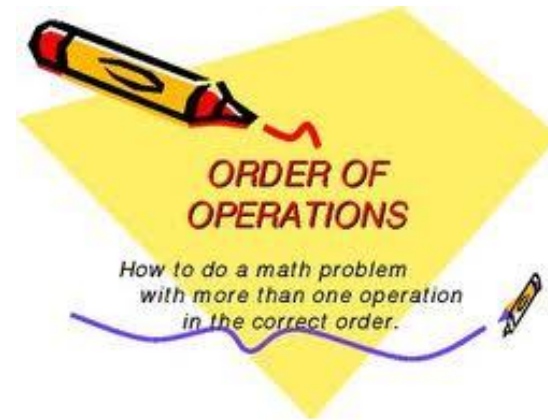
opposite



Having a different sign but the same numeral.

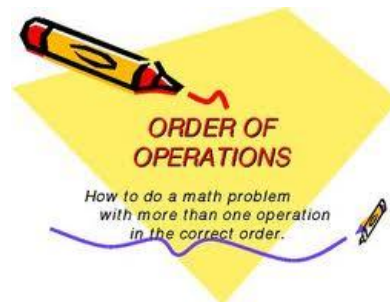
Order of Operations

Order of Operations



P arenthesis
E xponents
M ultiply / D ivide
A dd + S ubtract

Order of Operations



P arenthesis
E xponents
M ultiply / D ivide
A dd + S ubtract

Rules describing what sequence to use in evaluating expressions.

- (1) Evaluate within grouping symbols.
- (2) Do powers or roots.
- (3) Multiply or divide left to right.
- (4) Add or subtract left to right.

ordered pair

ordered pair

$(-5, 2)$
 (x, y)

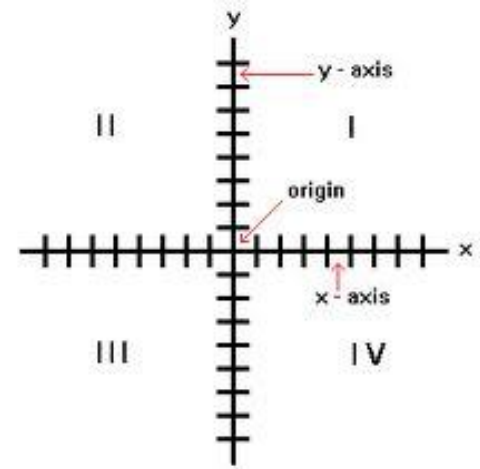
ordered pair

$(-5, 2)$
 (x, y)

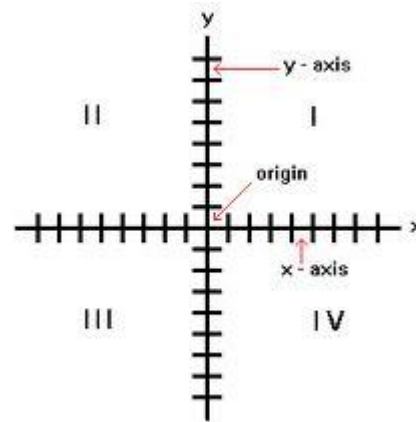
A pair of numbers that gives the coordinates of a point on a grid in this order (horizontal coordinate, vertical coordinate). Also known as a coordinate pair.

origin

origin



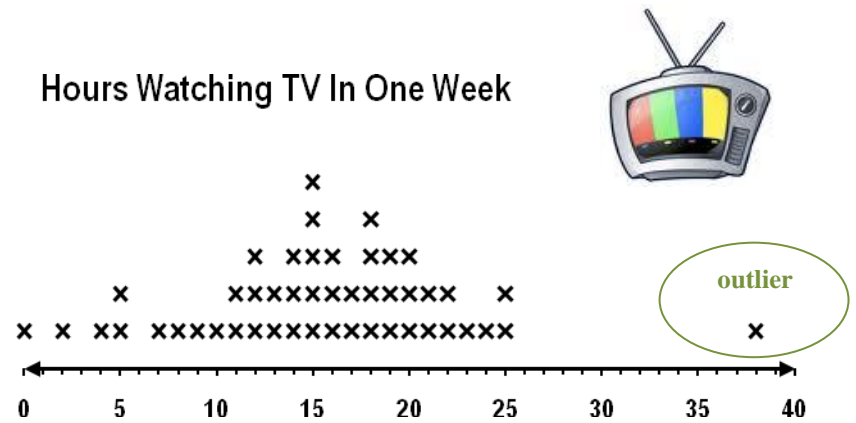
origin



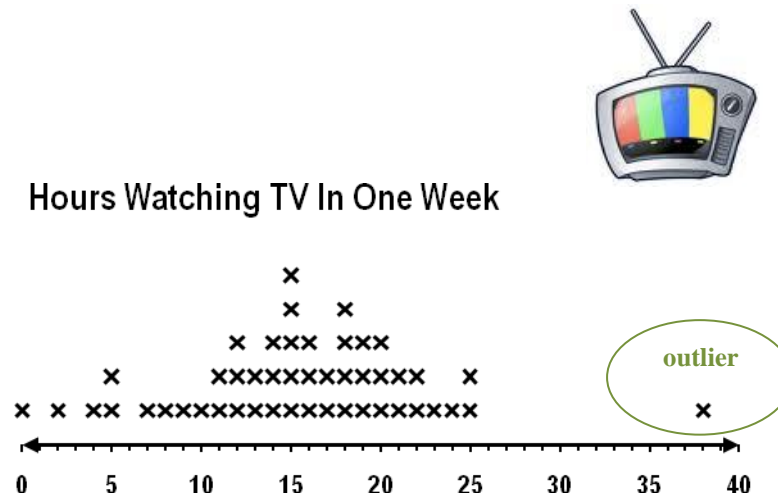
The intersection of the x- and y-axes in a coordinate plane, described by the ordered pair $(0, 0)$.

outlier

outlier



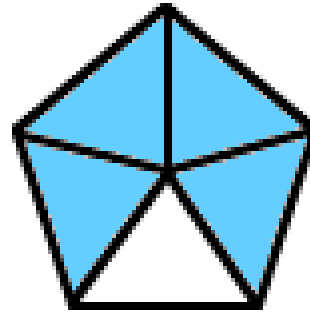
outlier



A number in a set of data that is much larger or smaller than most of the other numbers in the set.

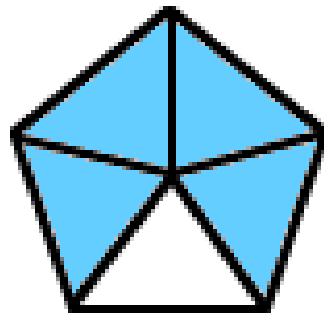
percent

percent



**80% of
the
pentagon
is shaded.**

percent

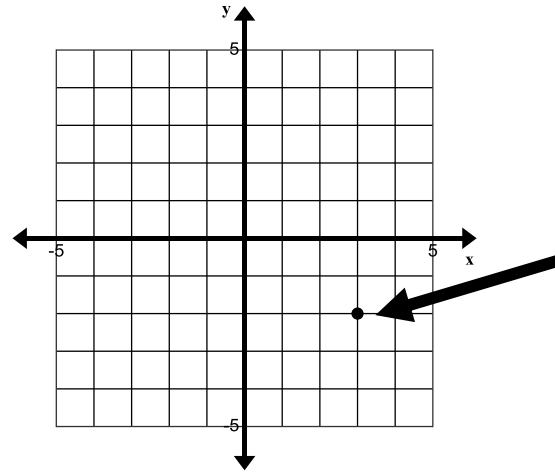


**80% of
the
pentagon
is
shaded.**

A special ratio that
compares a number to
100 using the symbol
%.

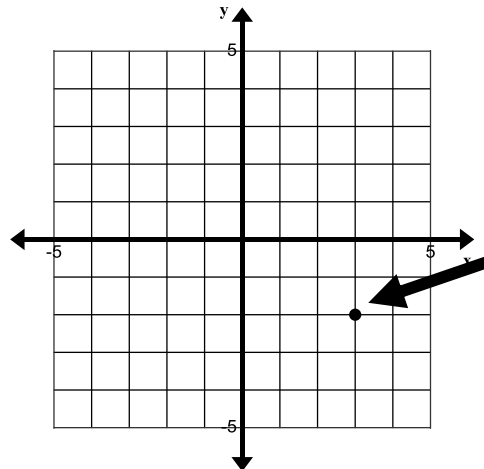
plot

plot



The point is plotted at (3, -2).

plot

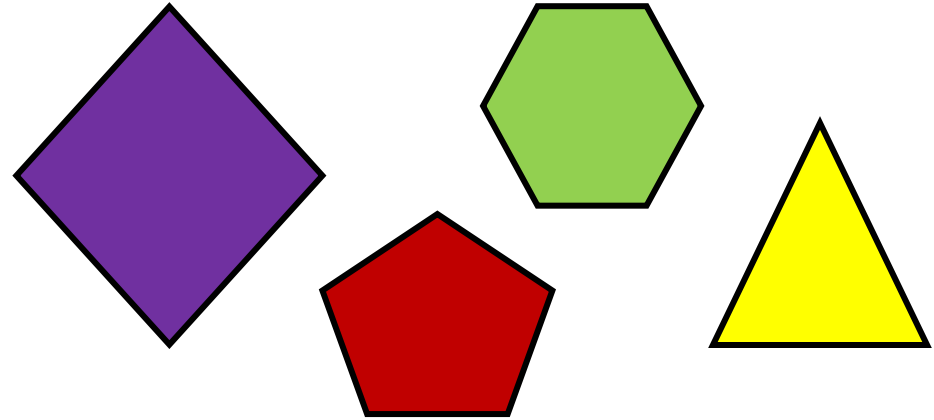


The point is plotted at (3, -2).

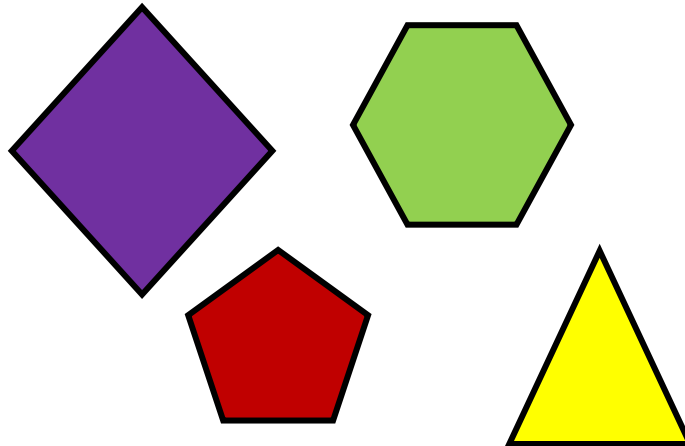
To place points on a graph or coordinate plane.

polygon

polygon



polygon



A closed figure formed
from line segments that
meet only at their
endpoints.

positive numbers

positive
numbers



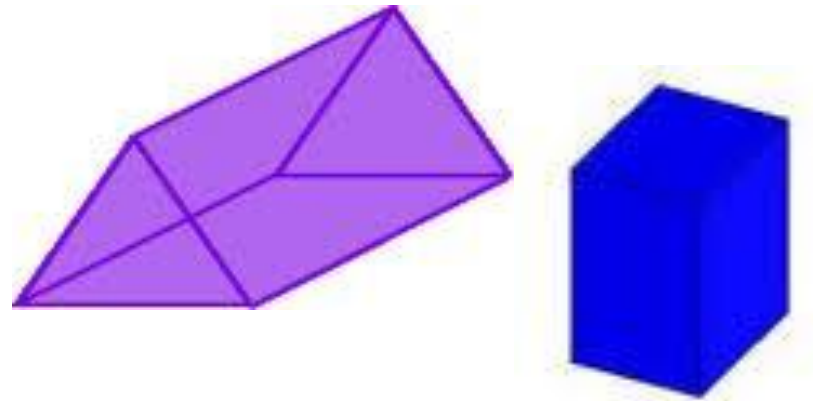
positive
numbers



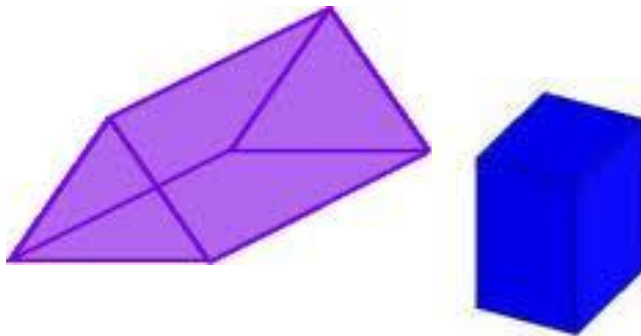
Numbers that are
greater than zero.

prism

prism



prism



A 3-dimensional figure that has two congruent and parallel faces that are polygons. The remaining faces are parallelograms.

product

product



Sunglasses are \$9.95 a pair.

$$\begin{array}{r} \$ 9.95 \\ \times \quad 3 \\ \hline \$29.85 \end{array}$$



product

product



Sunglasses are \$9.95
a pair.

$$\begin{array}{r} \$ 9.95 \\ \times \quad 3 \\ \hline \$29.85 \end{array}$$



product

The result of
multiplication.

proportion

proportion



$$\frac{2}{4} = \frac{4}{8}$$

proportion

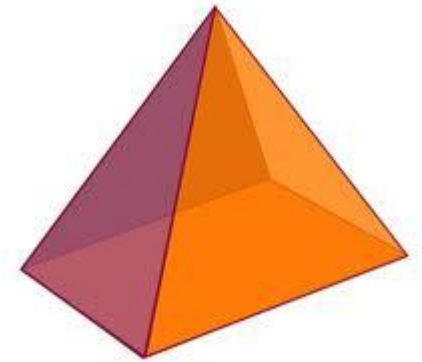
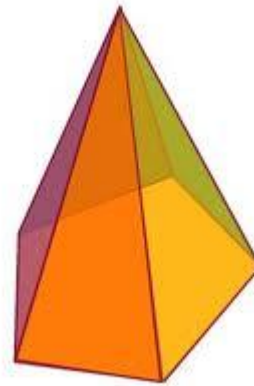


$$\frac{2}{4} = \frac{4}{8}$$

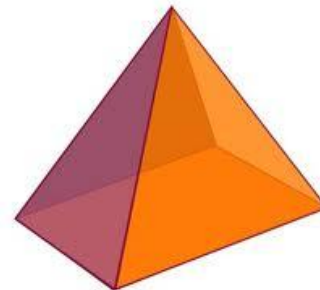
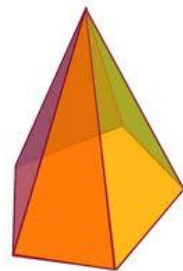
An equation showing that two ratios are equivalent.

pyramid

pyramid



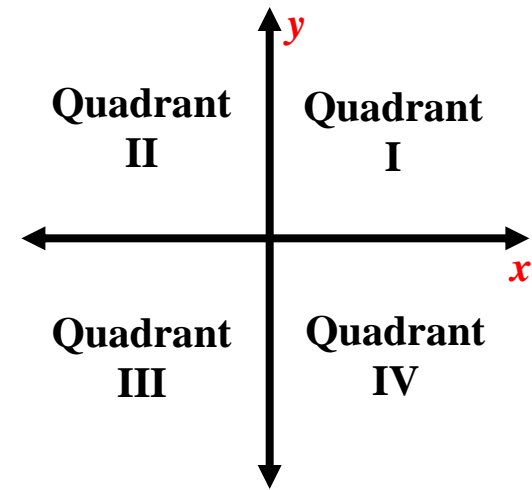
pyramid



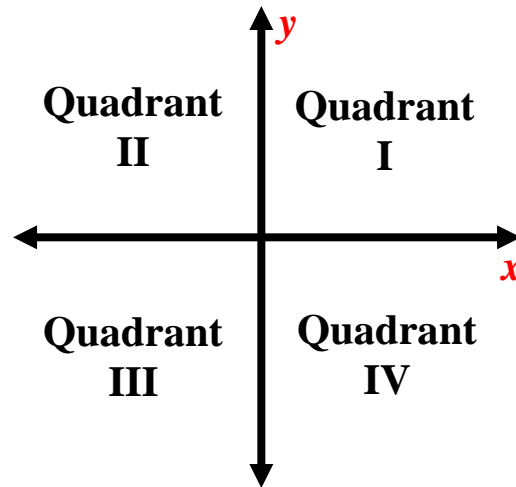
A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.

quadrants

quadrants



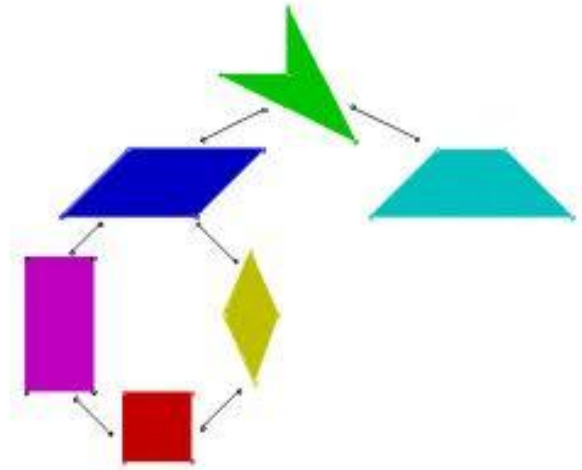
quadrants



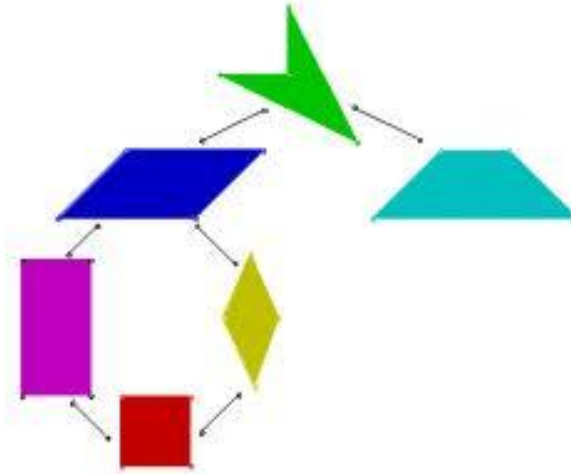
The four sections of a coordinate grid that are separated by the axes.

quadrilateral

quadrilateral



quadrilateral



A four-sided polygon.

quantity

quantity



3 candies
for
5 cents.

quantity



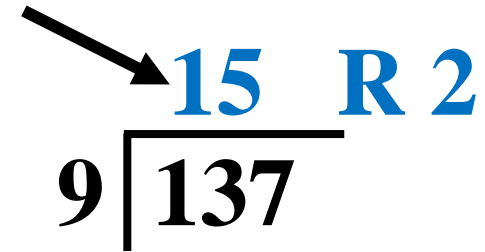
3 candies
for
5 cents.

An amount.

quotient

quotient

quotient

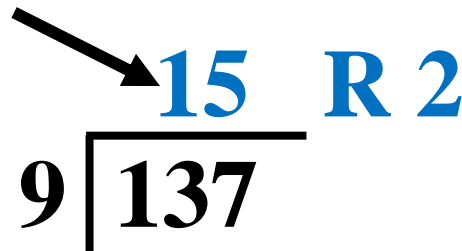


A diagram showing a division problem. The divisor is 9, the dividend is 137, and the quotient is 15 with a remainder of 2. An arrow points from the word "quotient" above to the number 15 in the quotient.

$$9 \overline{) 137} \begin{array}{r} 15 \\ \text{R } 2 \end{array}$$

quotient

quotient



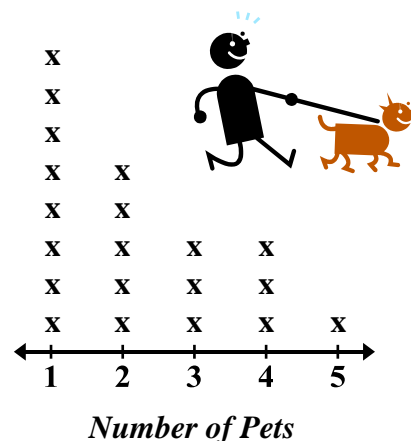
A diagram showing a division problem. The divisor is 9, the dividend is 137, and the quotient is 15 with a remainder of 2. An arrow points from the word "quotient" above to the number 15 in the quotient.

$$9 \overline{) 137} \begin{array}{r} 15 \\ \text{R } 2 \end{array}$$

The result of the
division of one
quantity by another.

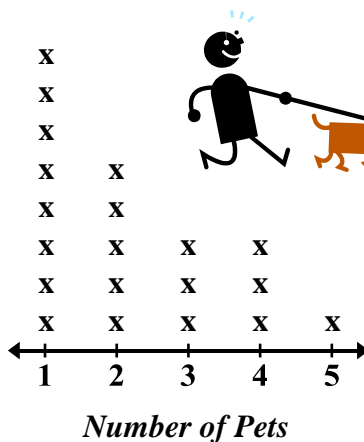
range

range



$5 - 1 = 4$
Range is 4.

range



$5 - 1 = 4$
Range is 4.

The difference between the greatest number and the least number in a set of numbers.

rate

rate



The car was traveling 65 miles per hour on the freeway.

rate

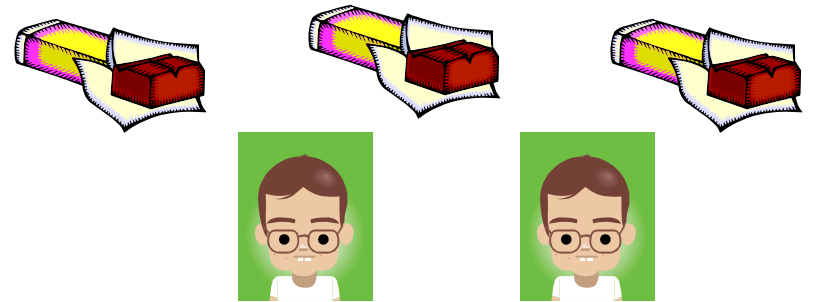


The car was traveling 65 miles per hour on the freeway.

A ratio comparing two different units.

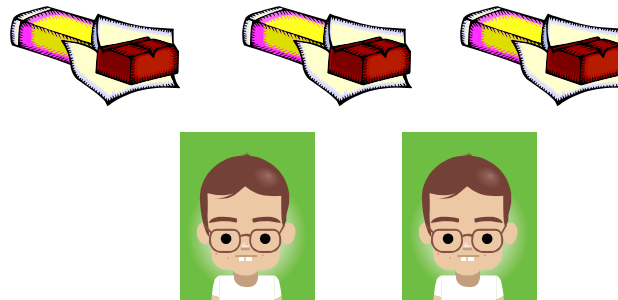
ratio

ratio



The ratio of chocolate bars to boys is
3:2.

ratio

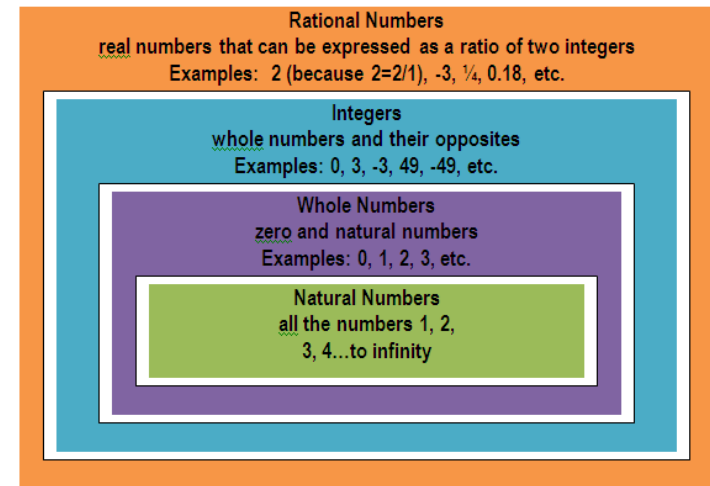


The ratio of chocolate bars to
boys is **3:2.**

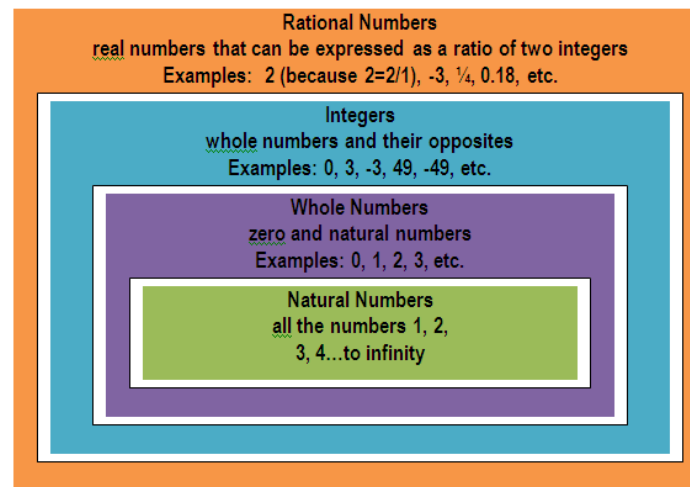
A comparison of
two numbers using
division.

rational number

rational
number



rational
number



A number that can
be expressed as a
ratio of two integers.

reciprocals

reciprocals

$$5 \times \frac{1}{5} = 1$$



reciprocals

reciprocals

$$5 \times \frac{1}{5} = 1$$



reciprocals

Two numbers whose product is 1. Also called multiplicative inverses.

rectangle

rectangle



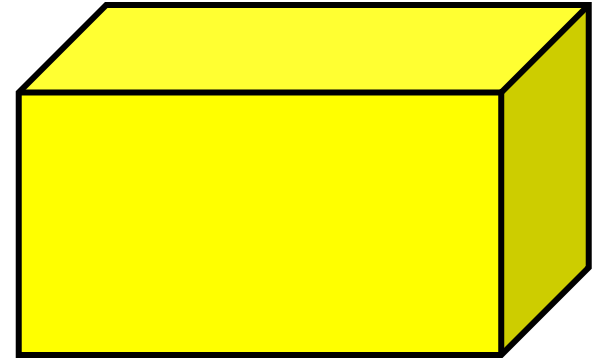
rectangle



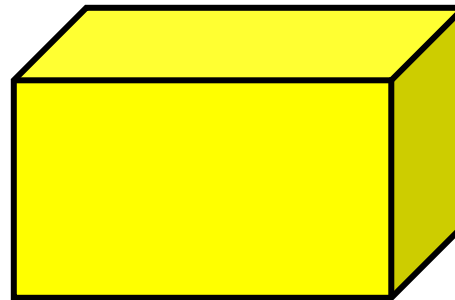
A quadrilateral with
two pairs of
congruent, parallel
sides and four right
angles.

right rectangular prism

right rectangular
prism



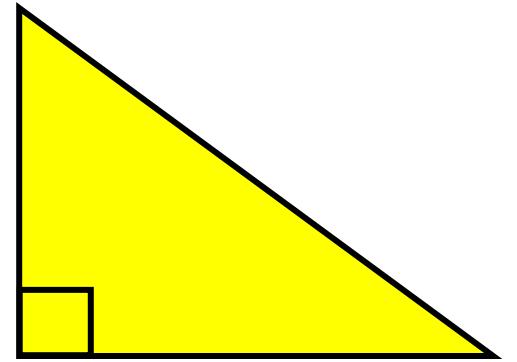
right rectangular
prism



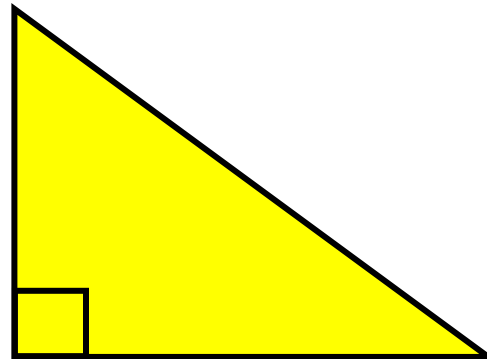
A prism with six rectangular faces where the lateral edge is perpendicular to the plane of the base.

right triangle

right triangle



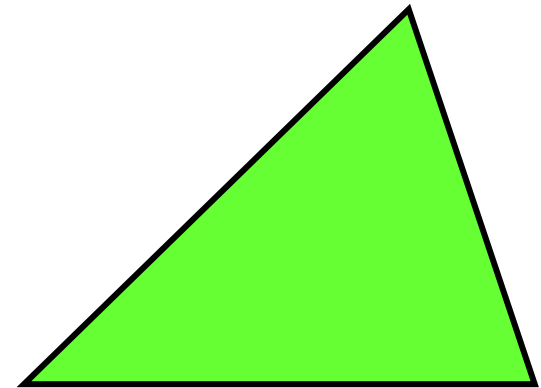
right triangle



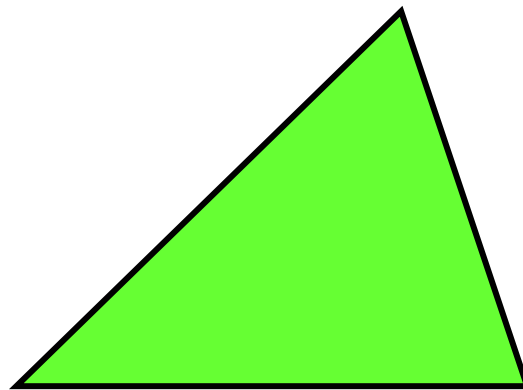
A triangle that
has one 90°
angle.

scalene triangle

scalene
triangle



scalene
triangle



A triangle that has
no congruent sides.

signed number

signed
number

-5 +8
+45 -23

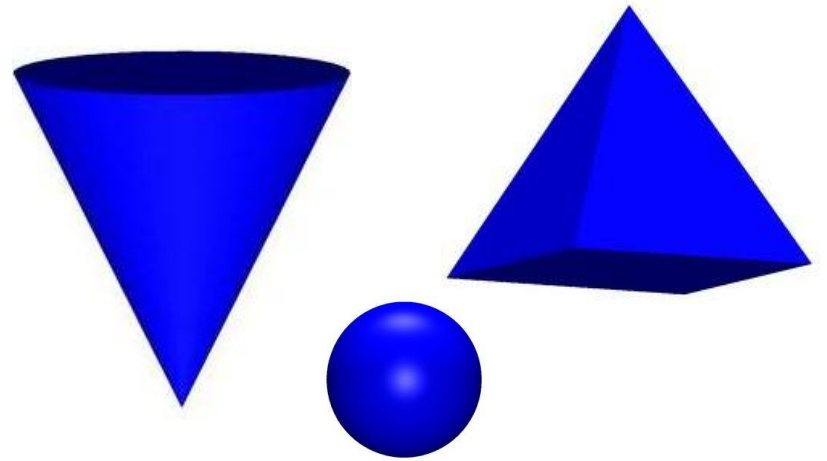
signed
number

-5 +8
+45 -23

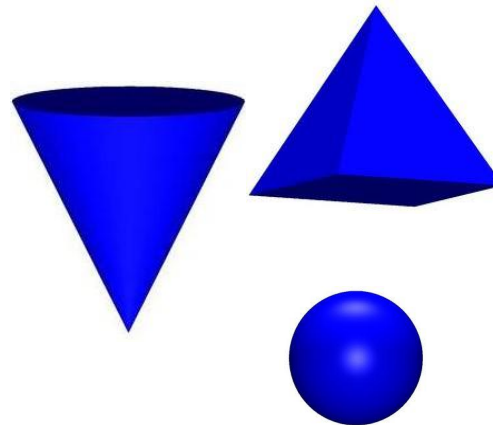
Positive or negative
number.

solid figure

solid figure



solid figure

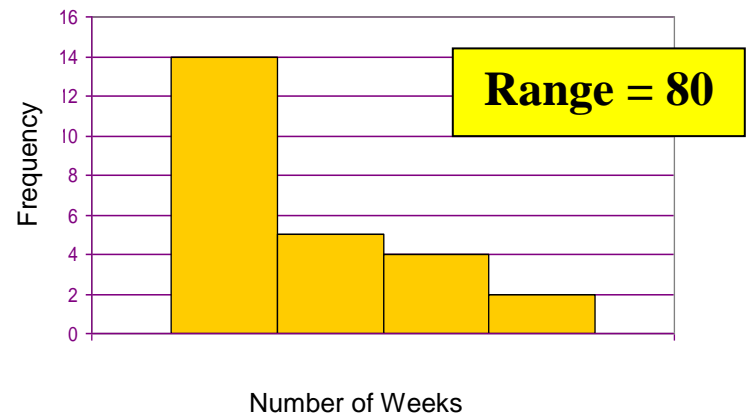


A geometric figure with 3 dimensions.

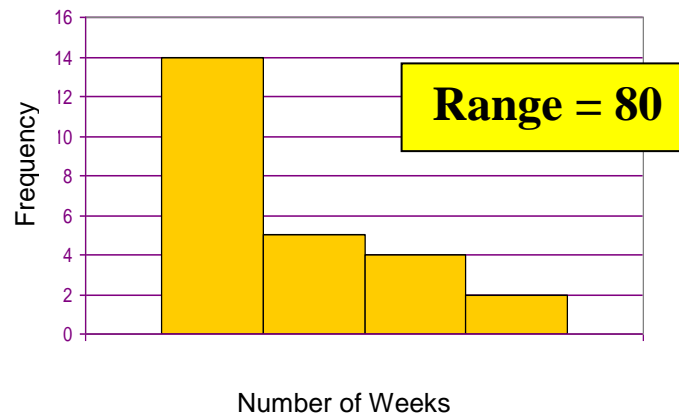
spread

spread

Number of Weeks on the Top 200 Chart



Number of Weeks on the Top 200 Chart

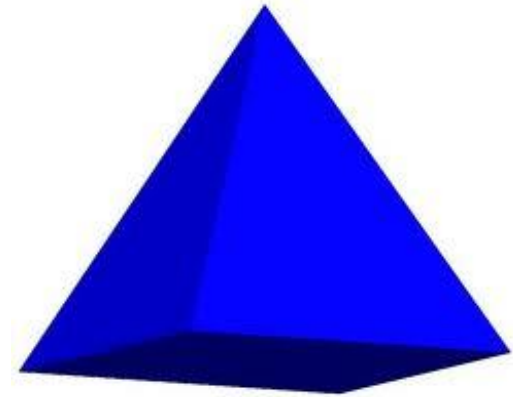


A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (Also known as measures of variation or dispersion.)

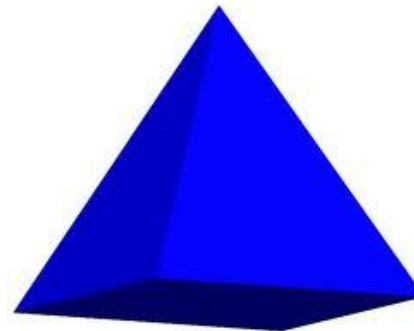
spread

square-based pyramid

square-based
pyramid



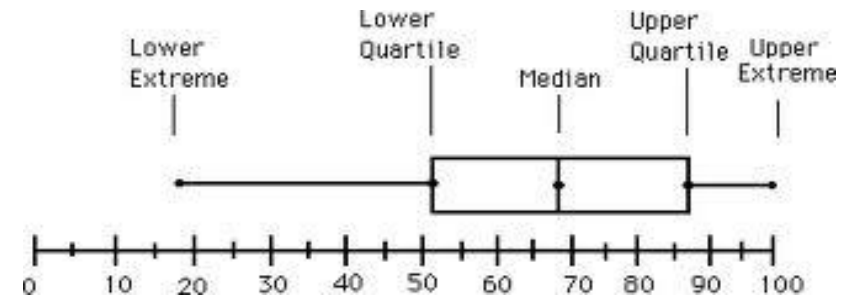
square-based
pyramid



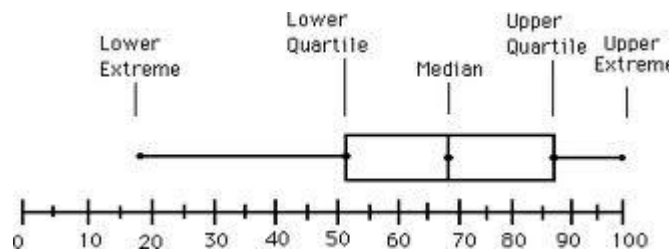
A polyhedron whose base is a square and whose other faces are triangles that share a common vertex.

statistical variability

statistical variability



statistical variability

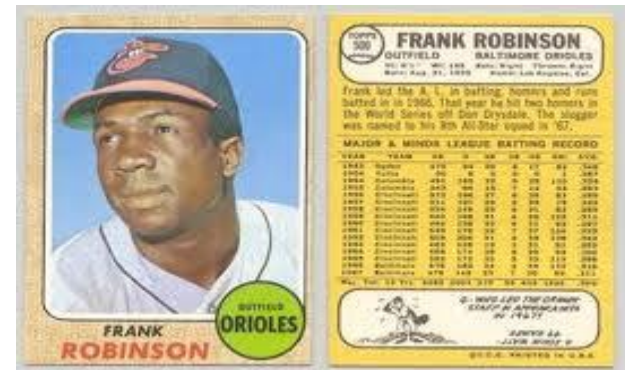


A variability or spread in a variable or a probability distribution. Common examples of measures of statistical dispersion are the variance, standard deviation, and interquartile range.

statistics

This baseball card shows statistics for a famous baseball player.

statistics



This baseball card shows statistics for a famous baseball player.

statistics



The science of collecting, organizing, representing, and interpreting data.

substitution

substitution

If x is equal to 9 , then ...

$$8x + 4 = ?$$

$$8(9) + 4 = 76$$

substitution

If x is equal to 9 , then ...

$$8x + 4 = ?$$

$$8(9) + 4 = 76$$

The replacement of the letters in an algebraic expression with known values.

subtrahend

subtrahend

$$\begin{array}{r} 27.34 \\ - 8.29 \\ \hline 19.05 \end{array} \leftarrow \text{subtrahend}$$

subtrahend

$$\begin{array}{r} 27.34 \\ - 8.29 \\ \hline 19.05 \end{array} \leftarrow \text{subtrahend}$$

In subtraction, the subtrahend is the number being subtracted.

sum

sum

$$45.3 + 92.9 = 138.2$$

sum



sum

$$45.3 + 92.9 = 138.2$$

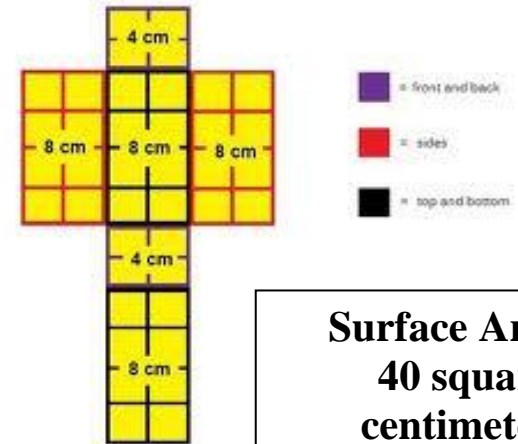
sum



The result of
addition.

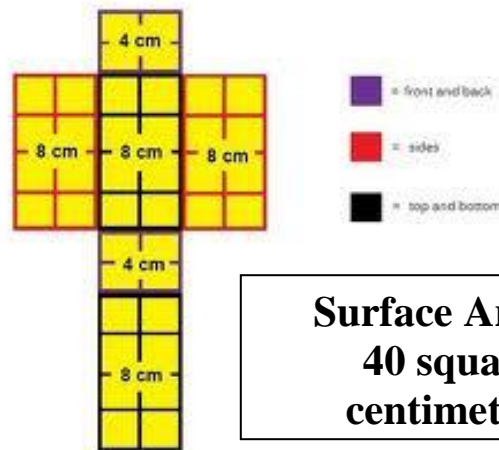
surface area

surface area



Surface Area =
40 square
centimeters

surface area




Surface Area =
40 square
centimeters

The total area of the faces (including the bases) and curved surfaces of a solid figure.


table

table



Student	Number of Books Read in the Summer
Sara	3
Jose	8
Timothy	2
Belinda	3
Gretchen	11
Trevor	7

table



Student	Number of Books Read in the Summer
Sara	3
Jose	8
Timothy	2
Belinda	3
Gretchen	11
Trevor	7

An organized way to list data. Tables usually have rows and columns of data.

tape diagram

tape diagram

156 vehicles drove by the school. There were 3 times as many passenger cars as trucks. How many vehicles were trucks?



tape diagram

156 vehicles drove by the school. There were 3 times as many passenger cars as trucks. How many vehicles were trucks?



A drawing that looks like a segment of tape, used to illustrate number relationships. Also known as a strip diagram, bar model, fraction strip, or length model.

term

term

$$5x + 14$$

terms

term

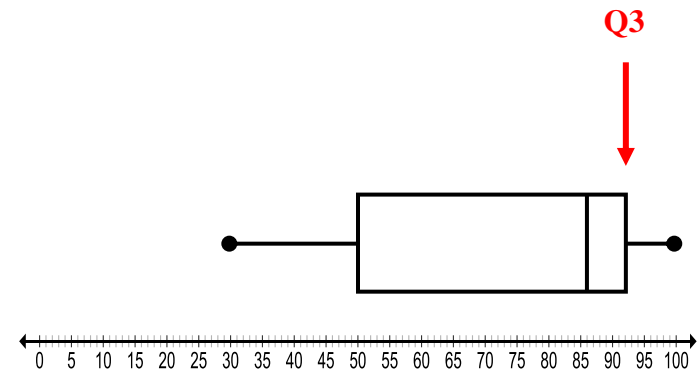
$$5x + 14$$

terms

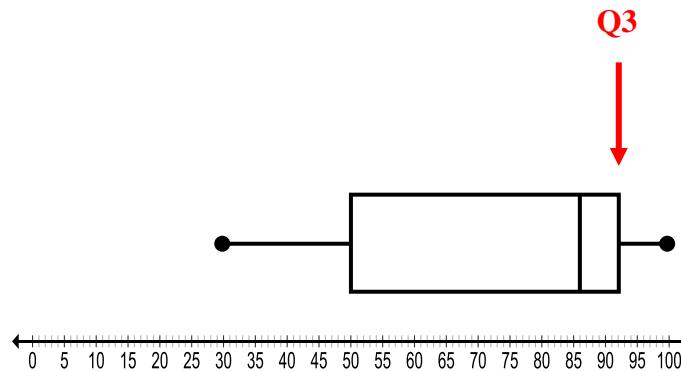
A number, variable, product, or quotient in an expression. A term is *not* a sum or difference.

third quartile

third quartile



third quartile



The third quartile is the middle (the median) of the upper half of the data on a box plot. One-fourth of the data lies above the third quartile and three-fourths lies below. Also known as Q3.

three-dimensional

**three-
dimensional**



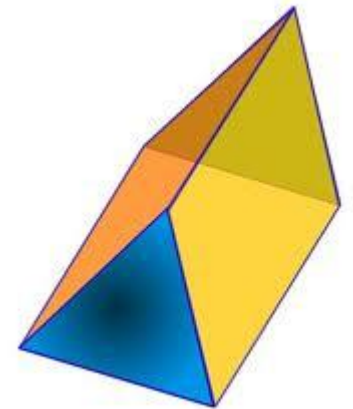
**three-
dimensional**



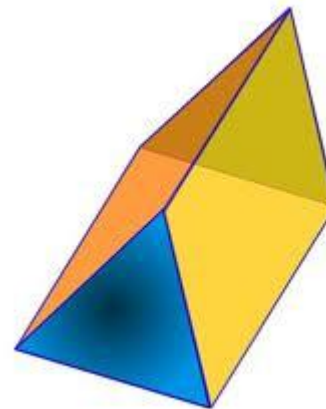
3-D. Existing in 3 dimensions; having length, width, and height.

triangular prism

triangular
prism



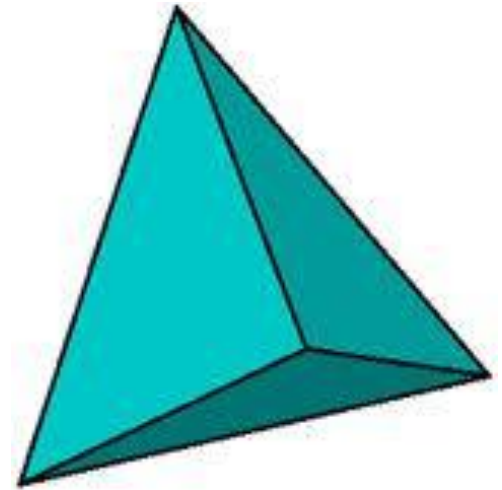
triangular
prism



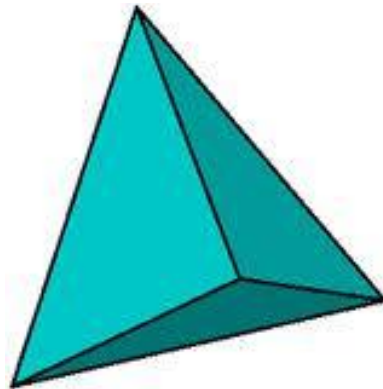
A prism with three rectangular faces and two triangular bases where the lateral edge is perpendicular to the plane of the base.

triangular pyramid

triangular
pyramid



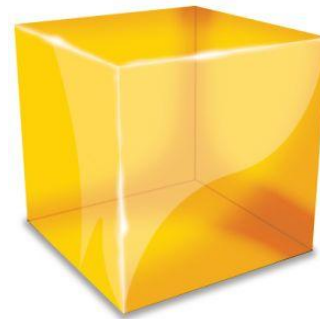
triangular
pyramid



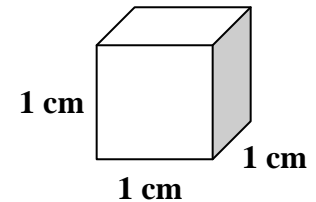
A pyramid with a
triangular base.

unit cube

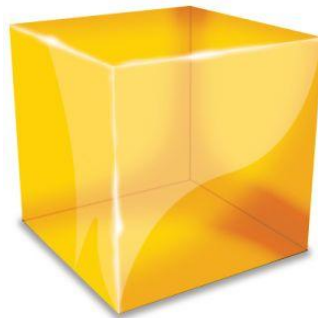
unit cube



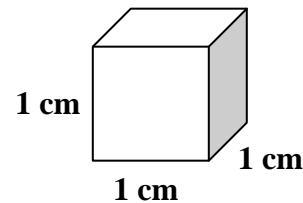
Volume of 1 cubic
(cm^3) centimeter



unit cube



Volume of 1 cubic
(cm^3) centimeter



A precisely fixed
quantity used to
measure volume.

unit rate

unit rate

Cereal is
\$0.43 per
1 ounce.



unit rate

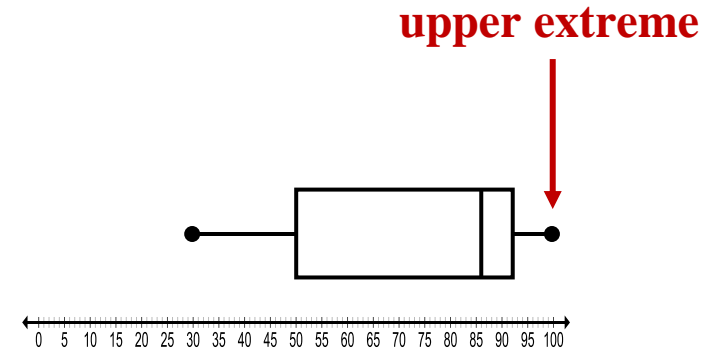
Cereal is
\$0.43 per
1 ounce.



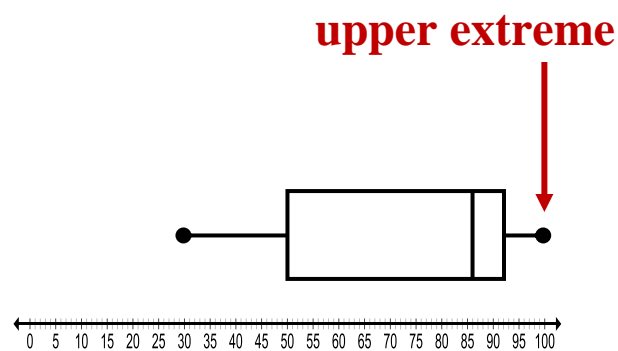
A rate with a
denominator of 1.

upper extreme

upper extreme



upper extreme



The greatest or largest number out of a data set, usually farther away from interquartile range than other data in set. (Also known as maximum.)

value

$$5x - 2 = 23$$

value

The value of x
is 5.

$$5x - 2 = 23$$

value

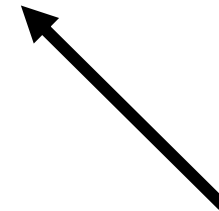
The value of x
is 5.

The amount
something is worth.

variable

variable

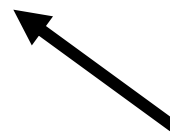
$$2n + 3 = 11$$



variable

variable

$$2n + 3 = 11$$

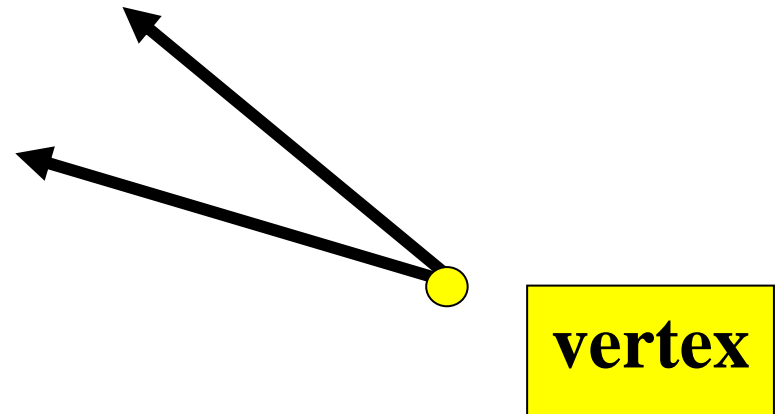


variable

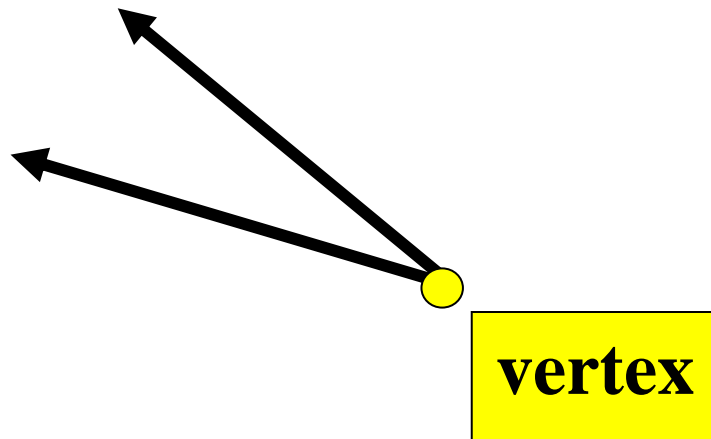
A quantity that changes or can have different values. A symbol, usually a letter, that can stand for a variable quantity.

vertex

vertex



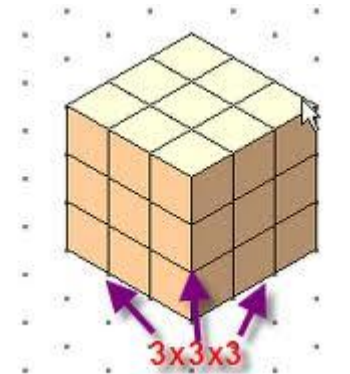
vertex



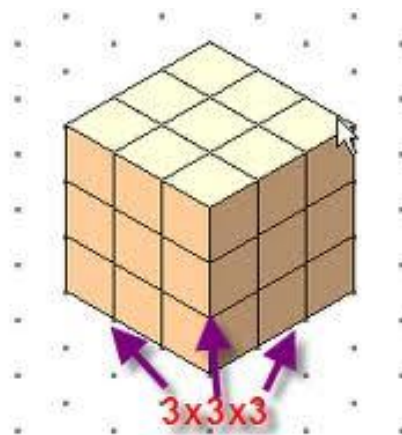
The point at which two line segments, lines, or rays meet to form an angle.
(plural – vertices)

volume

volume



Volume =
27 cubic
units



Volume =
27 cubic
units

The number of cubic
units it takes to fill a
figure.

volume

whole numbers

whole
numbers

0, 1, 2, 3...

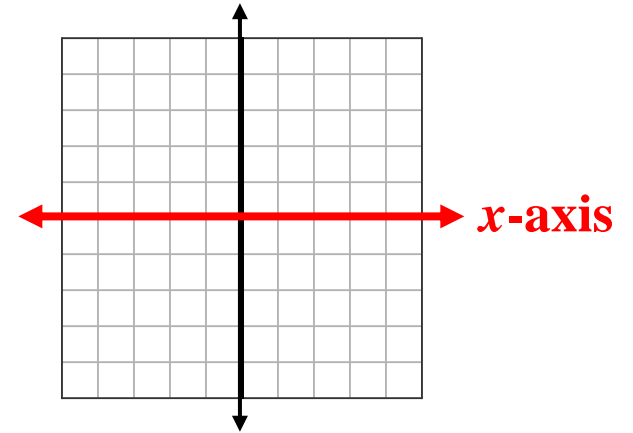
whole
numbers

0, 1, 2, 3...

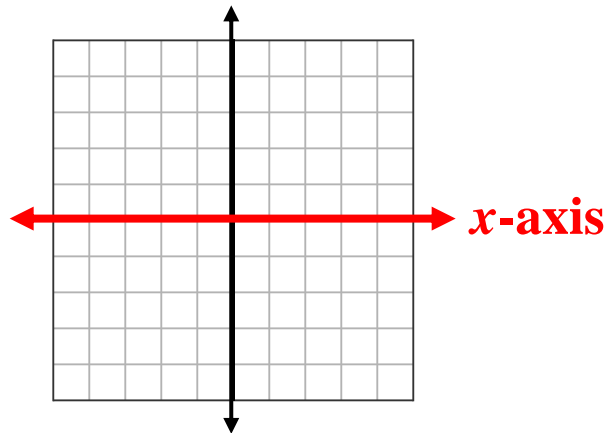
Any of the numbers 0,
1, 2, 3, 4, 5, and so on.

x -axis

x -axis



x -axis



In a Cartesian grid, the horizontal axis.

x -coordinate

x -coordinate

$(7, 2)$

x -coordinate

x -coordinate

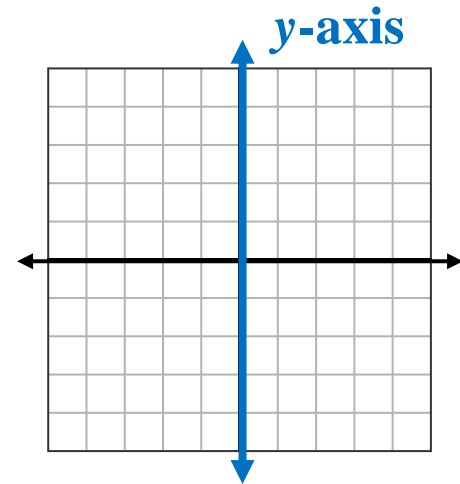
$(7, 2)$

x -coordinate

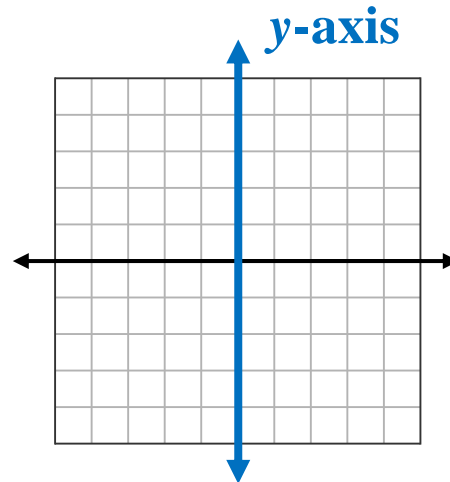
In an ordered pair, the value that is always written first.

y-axis

y-axis



y-axis



In a Cartesian grid, the vertical axis.

y -coordinate

y -coordinate

$(7, 2)$

y -coordinate

y -coordinate

$(7, 2)$

y -coordinate

In an ordered pair, the value that is always written second.

