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:

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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.
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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

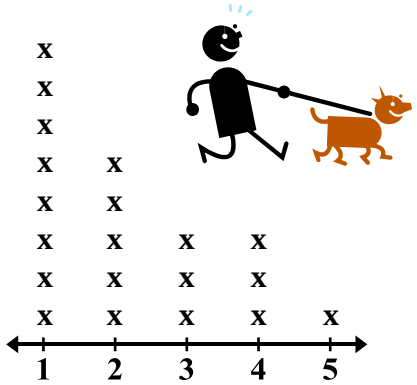
Example: If this man owes $75 on a bill, that is -$75. The magnitude of his debt is described as:

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

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

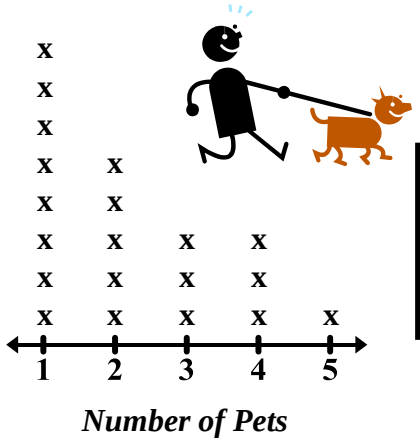
maximum

maximum



The maximum is 5.

maximum



The maximum is 5.

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

mean

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mean

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

Step 1:

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

Step 2:

238 ÷7 = 34 ⟵ mean

---

mean

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

Step 1:

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

Step 2:

238 ÷7 = 34 ⟵ 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

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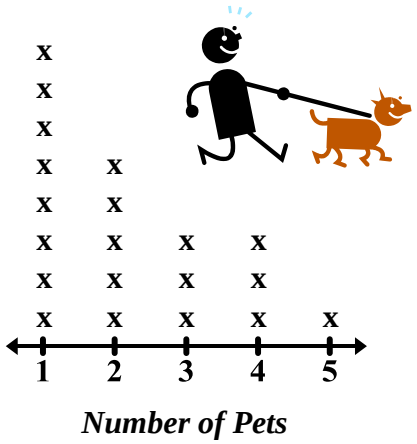
In statistics, the absolute deviation of an element of a data set is the absolute difference between that element and a given point.

measure of center

measure of center



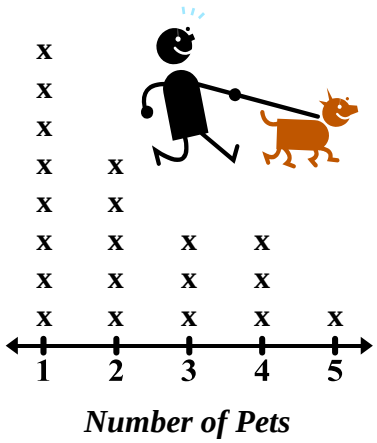
Examples:

Mode = 1

Median = 2

Mean = 2.3

measure of center



Examples:

Mode = 1

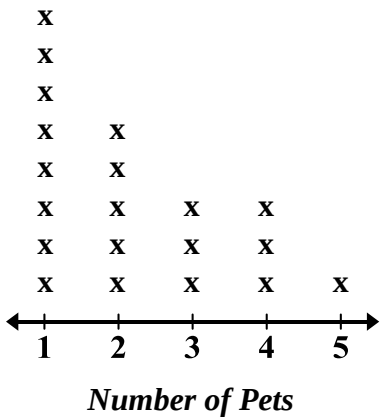
Median = 2

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.)

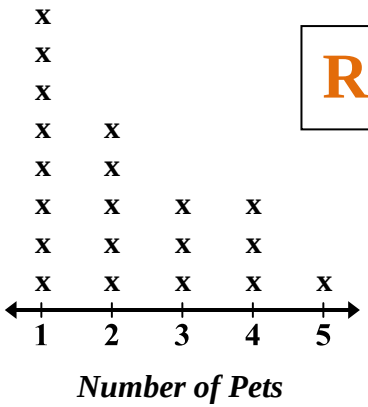
measure of variation

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

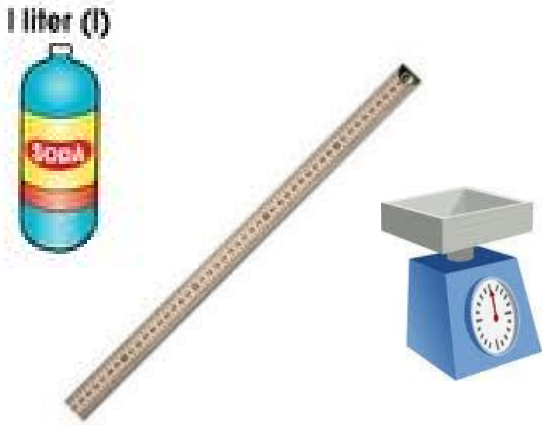
median

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

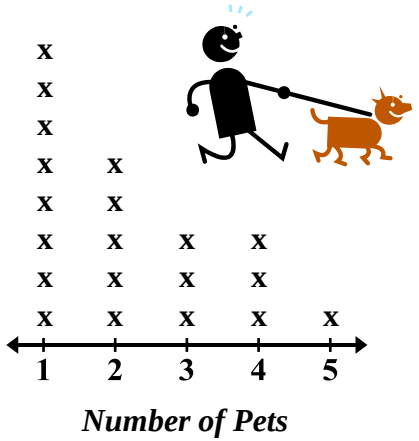
metric system



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.

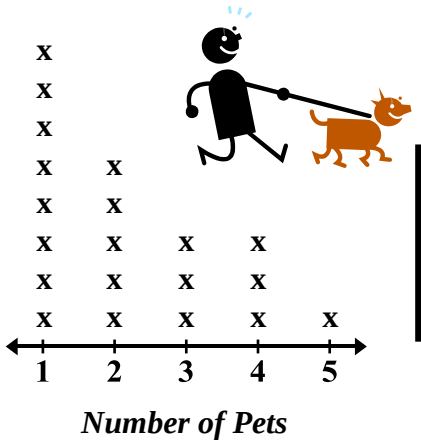
minimum

minimum



The minimum is 1.

minimum



The minimum is 1.

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

minuend

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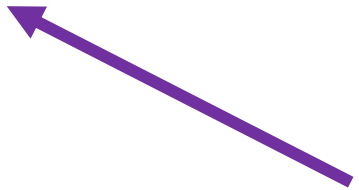
minuend

43.2 – 27.9 = 15.3



minuend

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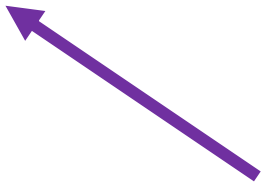
minuend

43.2 – 27.9 = 15.3



minuend

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

mixed number

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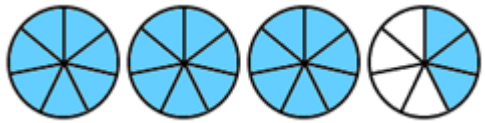
mixed number

Example:

$3\frac{3}{7}$



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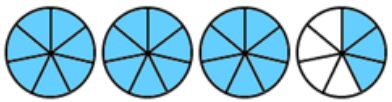
mixed number

Example:

$3\frac{3}{7}$



A number with an integer and a fraction part.

multiple

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multiple

Example:

Multiples of 

7, 14, 21, 28, 35, 42, 49…

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multiple

Example:

Multiples of 

7, 14, 21, 28, 35, 42, 49…

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

Multiplicative Identity Property of 1

Multiplicative Identity Property of 1

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

Multiplicative Identity Property of 1

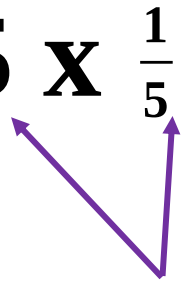
$$a \times 1 = 1 \times a = a$$

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

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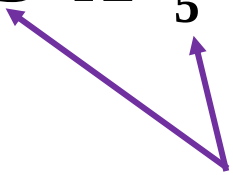

multiplicative inverses

Two numbers whose product is 1. Also called reciprocals.

negative numbers

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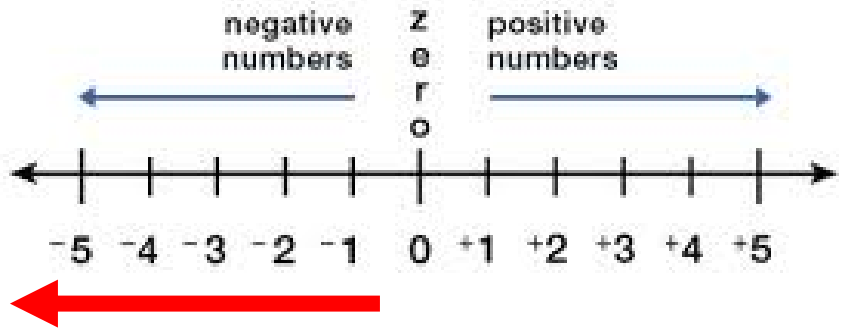
negative numbers



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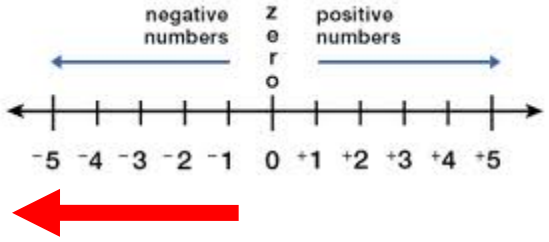
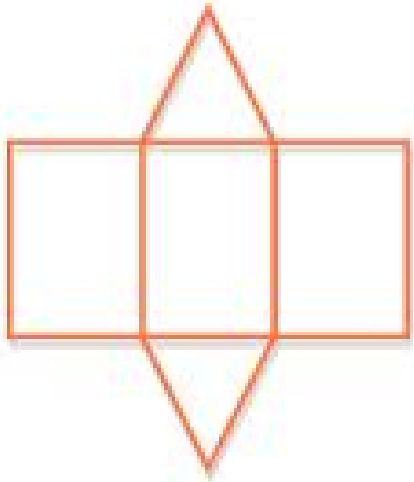
negative numbers



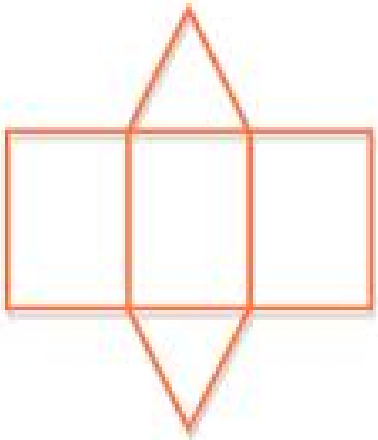
Numbers less than 0.

net

net



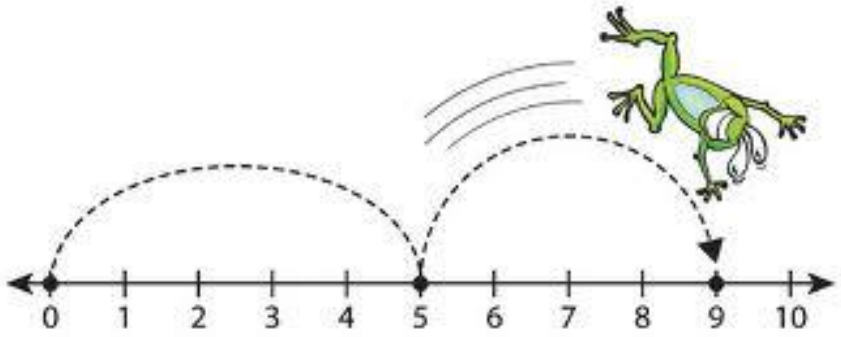
net



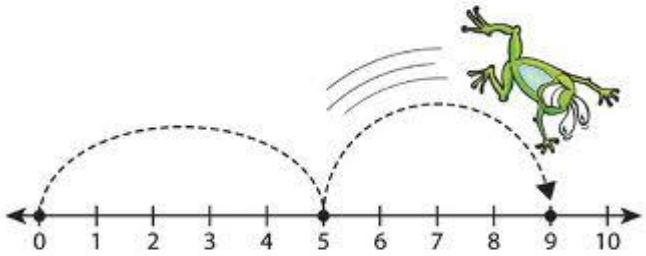
A 2-dimensional shape that can be folded into a 3-dimensional figure is a net of that figure. (Also called a network.)

number line

number line



number line

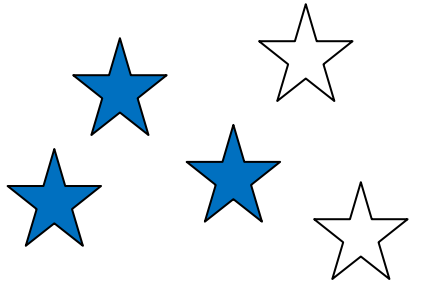


A diagram that represents numbers as points on a line.

numerator

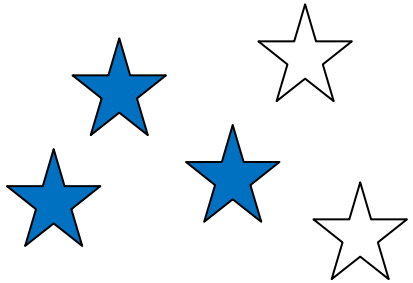
numerator

$\frac{3}{5}$ ← numerator



numerator

$\frac{3}{5}$ ← numerator



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

numerical expression

numerical expression

5 + 9

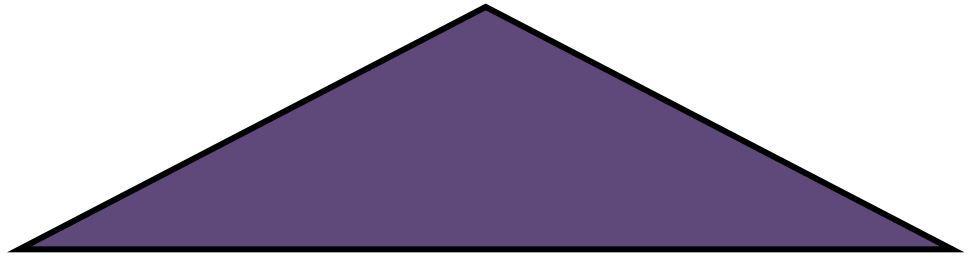
numerical expression

5 + 9

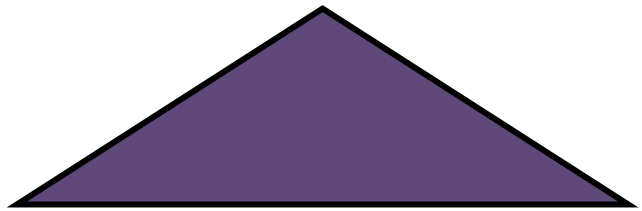
A mathematical statement including numbers and operations.

obtuse triangle

obtuse triangle



obtuse triangle



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

opposite

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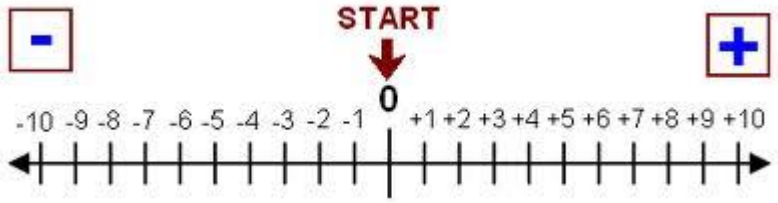
opposite

+3 and -3 are opposites.



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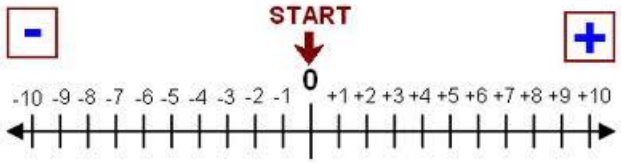
opposite

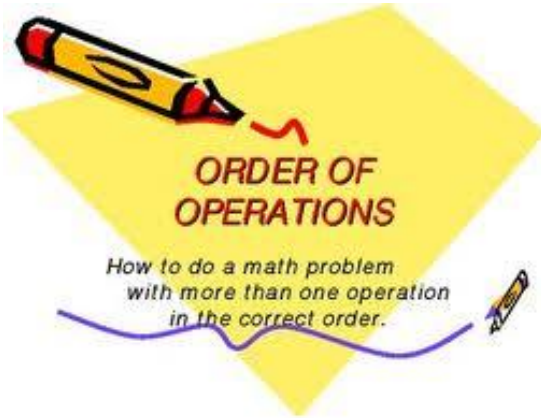
+3 and -3 are opposites.



Having a different sign but the same numeral.

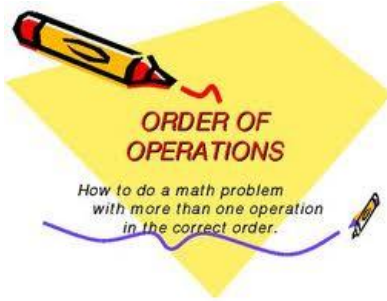
Order of Operations

Order of Operations



Parenthesis
Exponents
Multiply / **D**ivide
Add + **S**ubtract

Order of Operations



Parenthesis
Exponents
Multiply / **D**ivide
Add + **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

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ordered pair

(-5, 2)

(*x* , *y*)

---

ordered pair

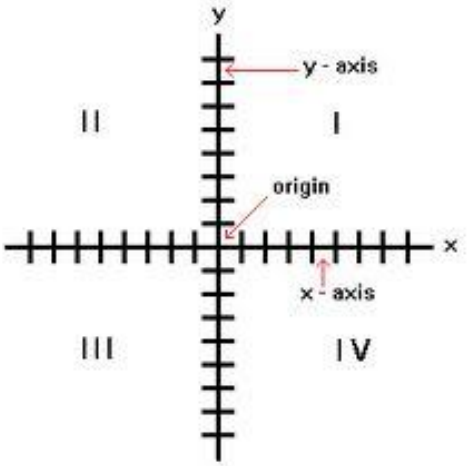
(-5, 2)

(*x* , *y*)

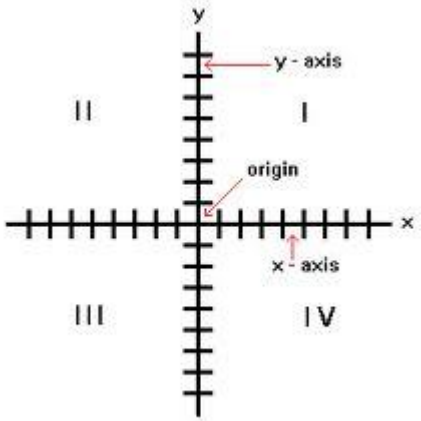
A pair of numbers that gives the coordinates of a point on a grid in this order (horizontal coordinate, vertical coordinate). Also known as a coordinate pair.

origin

origin



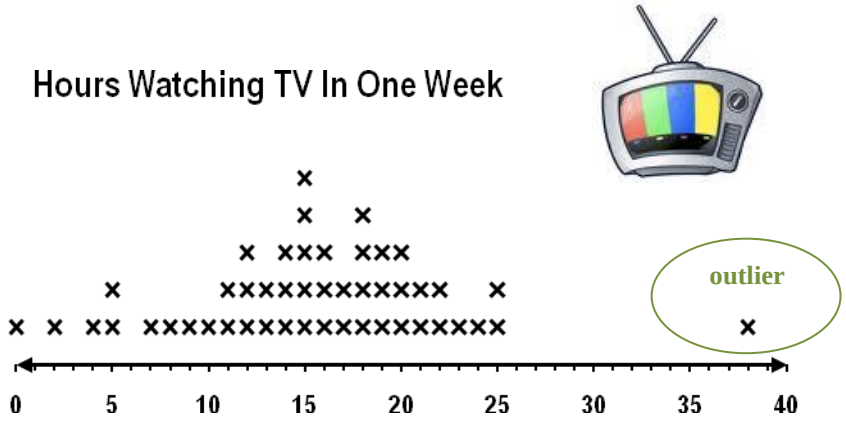
origin



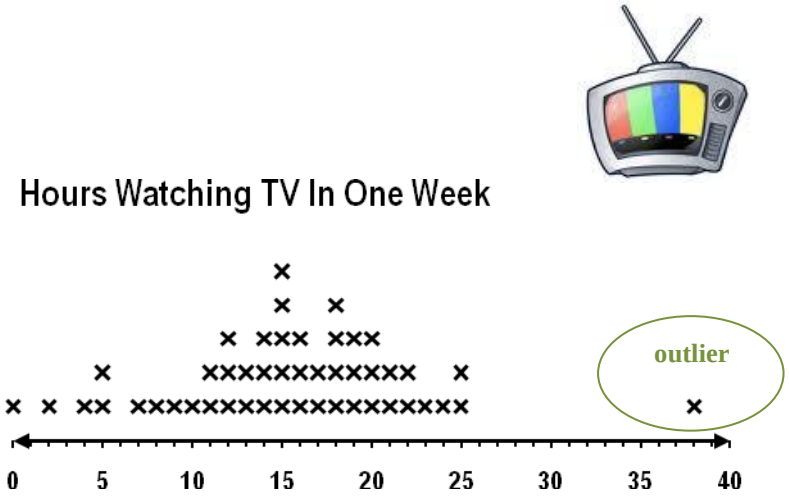
The intersection of the *x*- and *y*-axes in a coordinate plane, described by the ordered pair (0, 0).

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

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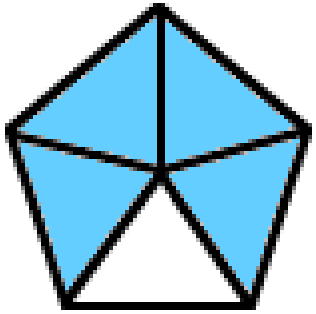
percent



80% of the pentagon is shaded.

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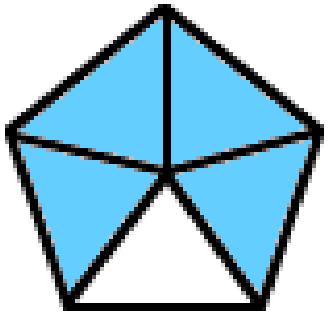
percent



80% of the pentagon is shaded.

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

plot

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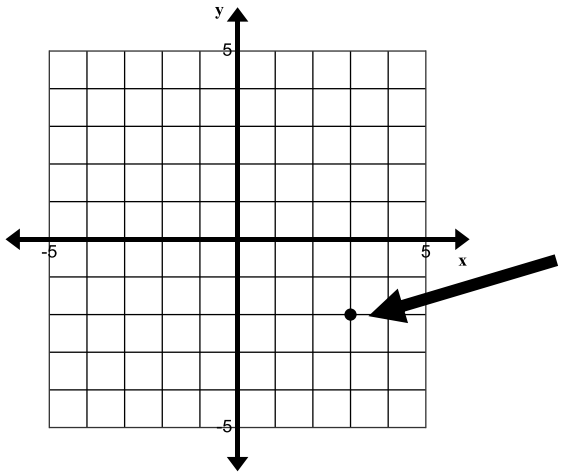
plot



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

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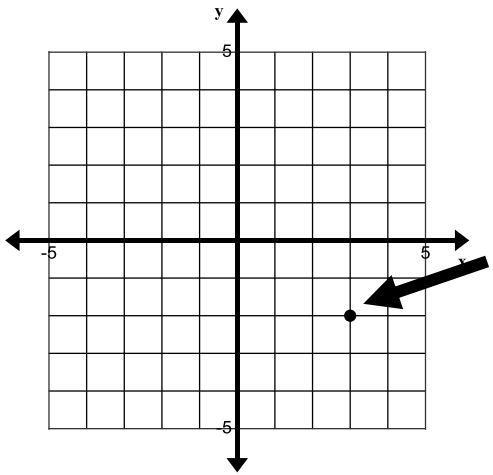
plot

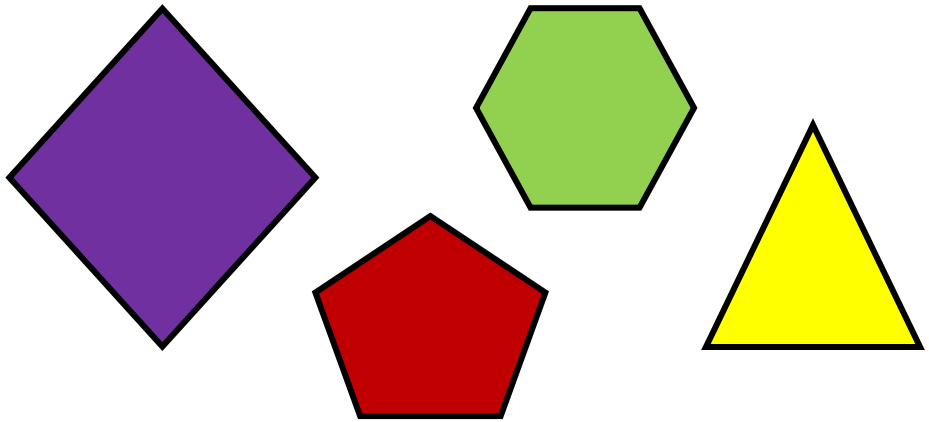


The point is plotted at (3, -2).

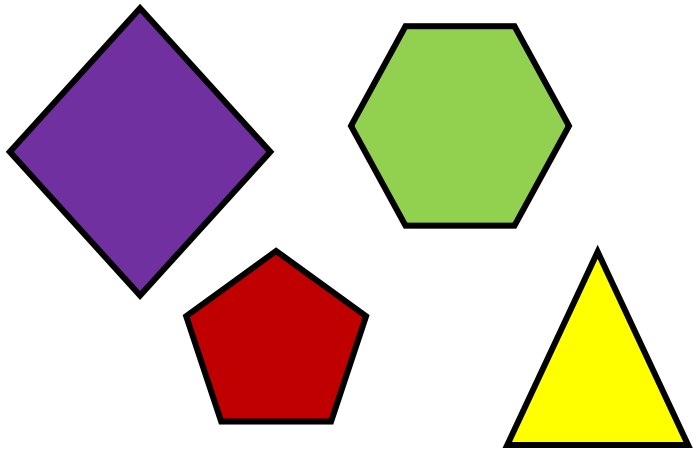
To place points on a graph or coordinate plane.

polygon

polygon



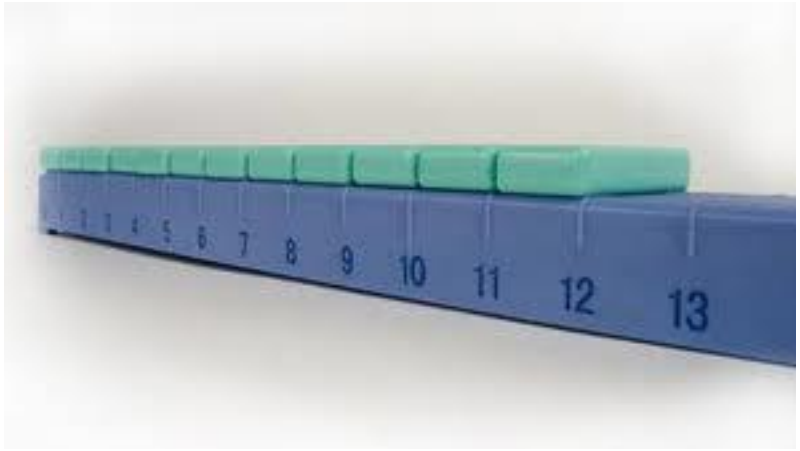
polygon



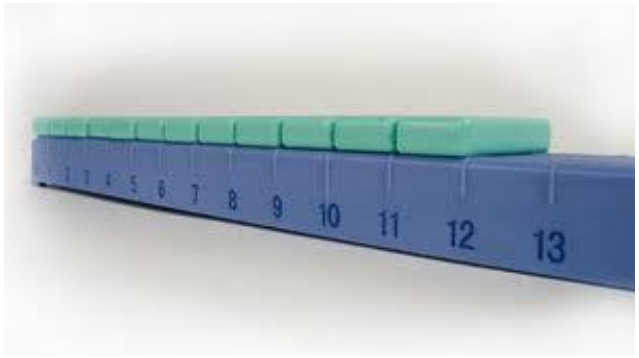
A closed figure formed from line segments that meet only at their endpoints.

positive numbers

positive numbers



positive numbers



Numbers that are greater than zero.

prism

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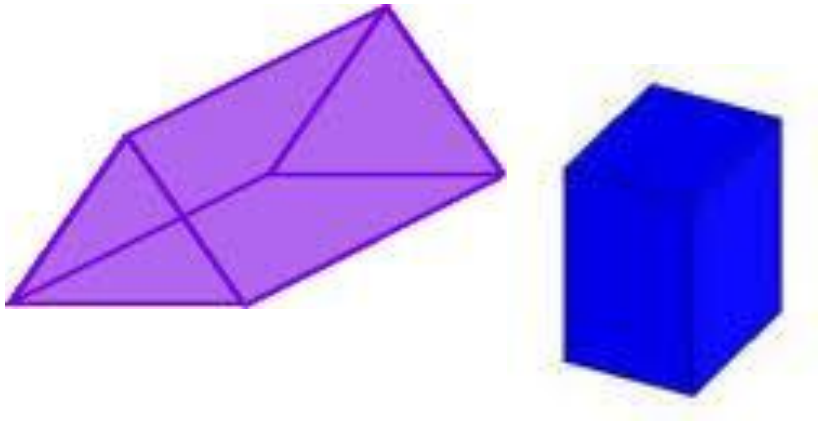
prism



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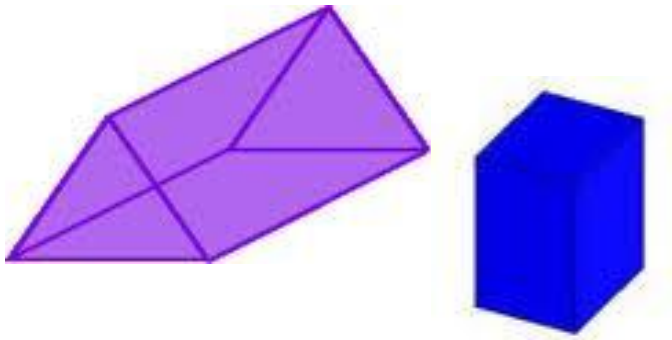
prism



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.

$ 9.95
x 3
$29.85

product

product

Sunglasses are $9.95 a pair.

$ 9.95
x 3
$29.85

product

The result of multiplication.

proportion

proportion

$\frac{2}{4}$

$\frac{4}{8}$

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

proportion

$\frac{2}{4}$

$\frac{4}{8}$

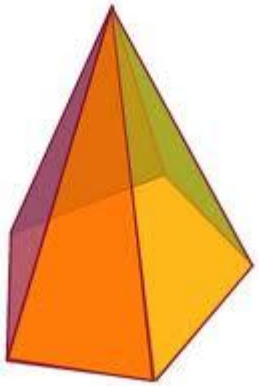
$\frac{2}{4} = \frac{4}{8}$

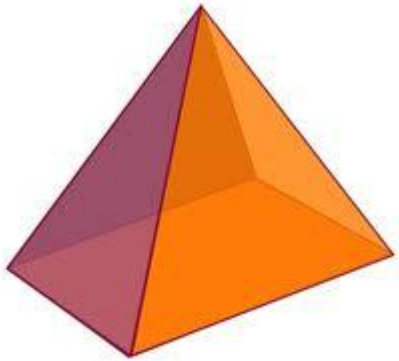
An equation showing that two ratios are equivalent.

pyramid

---

pyramid





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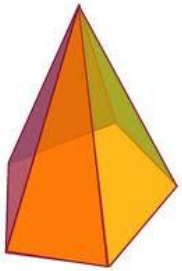
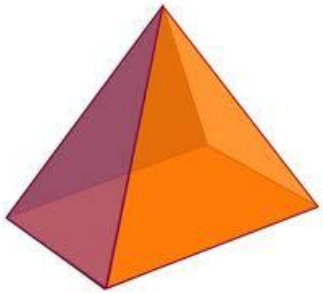
pyramid

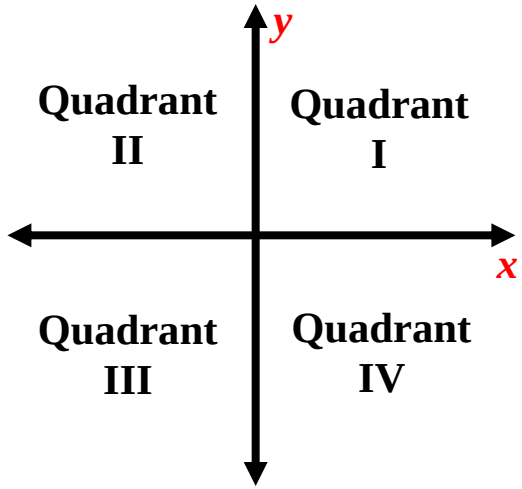




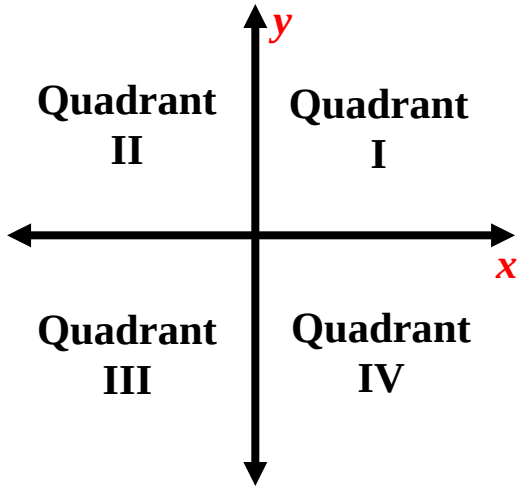
A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.

quadrants

quadrants



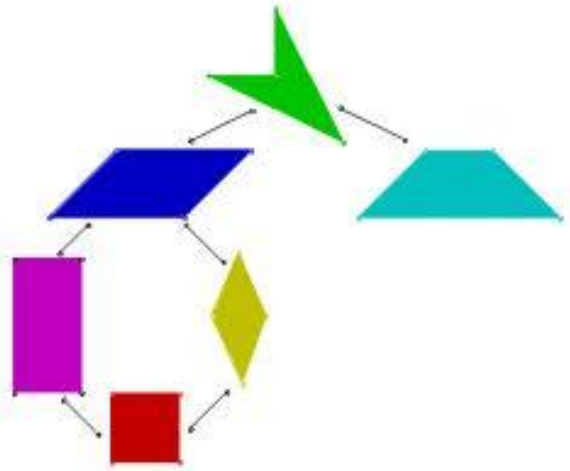
quadrants



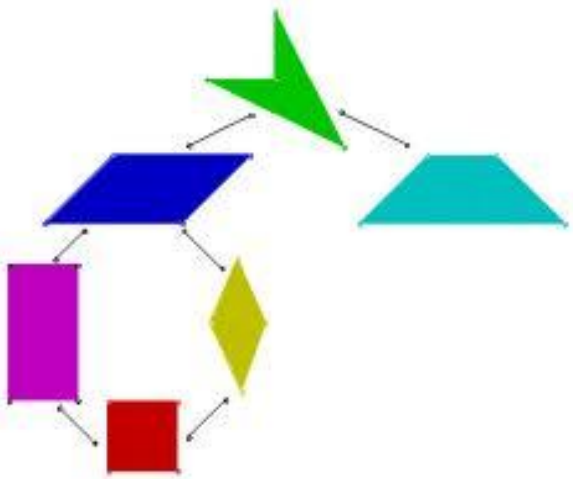
The four sections of a coordinate grid that are separated by the axes.

quadrilateral

quadrilateral



quadrilateral



A four-sided polygon.

quantity

---

quantity

3 candies for 5 cents.

---

quantity

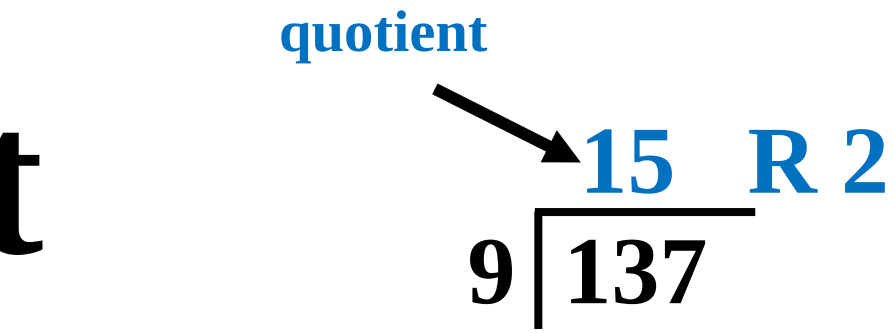
3 candies for 5 cents.

An amount.

quotient

---

quotient



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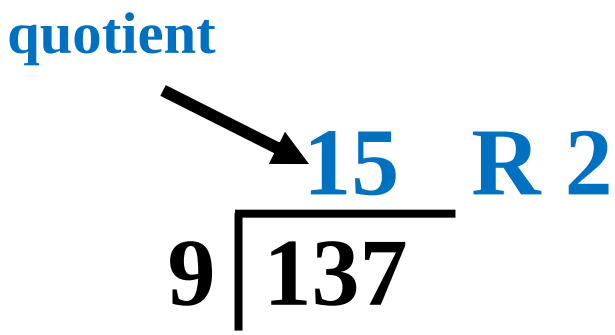
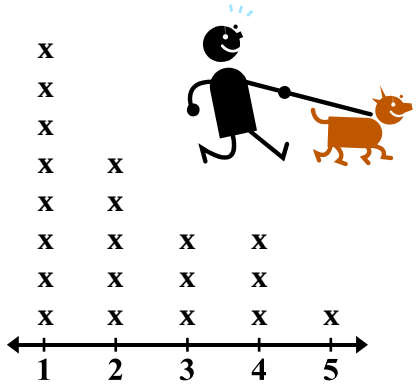
quotient



The result of the division of one quantity by another.

range

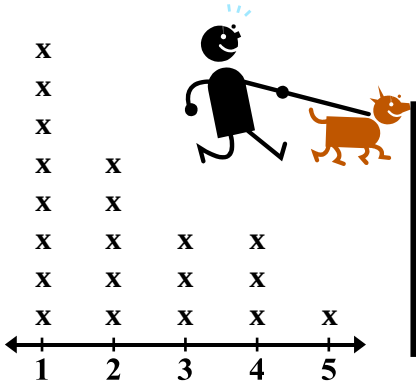
range



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.

---

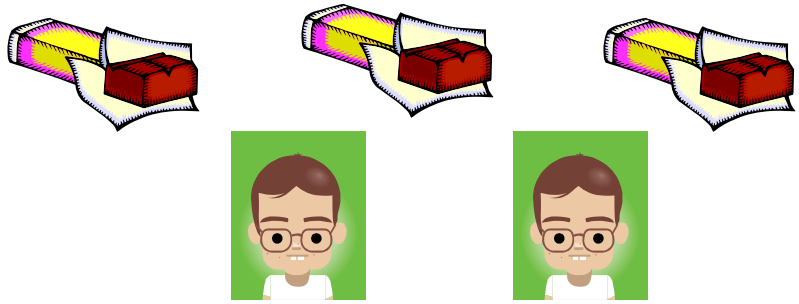
rate

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

A ratio comparing two different units.

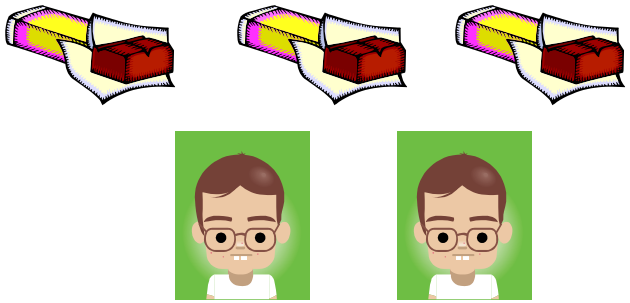
ratio

ratio



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

ratio

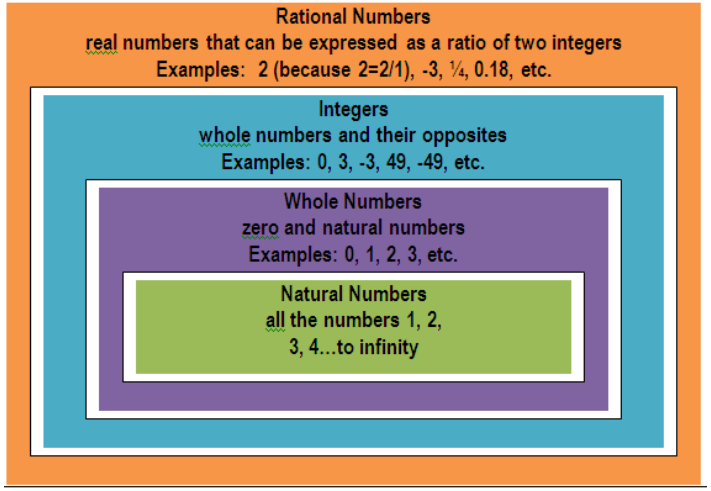


The ratio of chocolate bars to boys is 3:2.

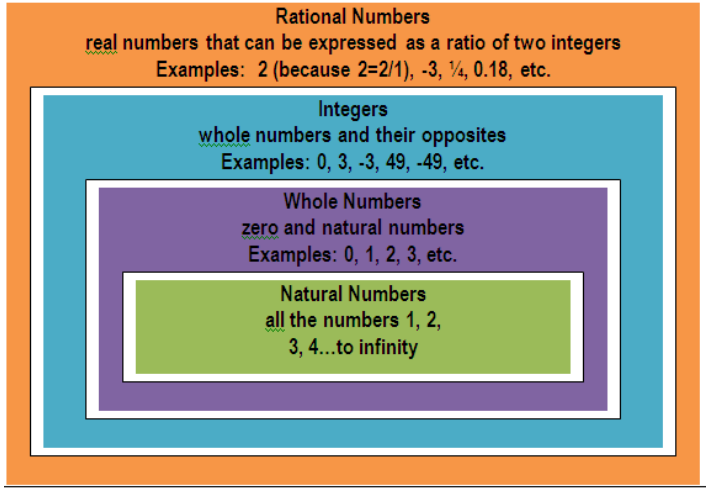
A comparison of two numbers using division.

rational number

rational number



rational number

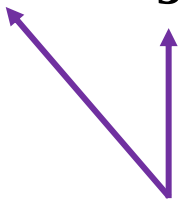


A number that can be expressed as a ratio of two integers.

reciprocals

reciprocals

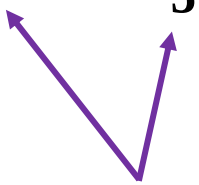
$5 \times \frac{1}{5} = 1$



reciprocals

reciprocals

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



reciprocals

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

rectangle

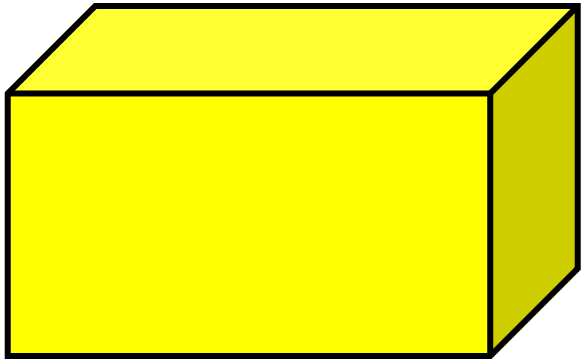
rectangle

rectangle

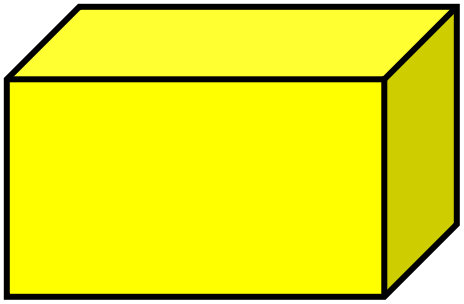
A quadrilateral with two pairs of congruent, parallel sides and four right angles.

right rectangular prism

right rectangular prism



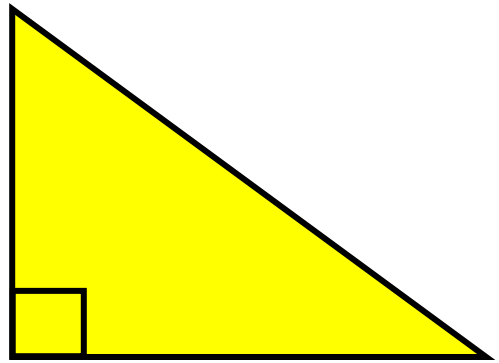
right rectangular prism



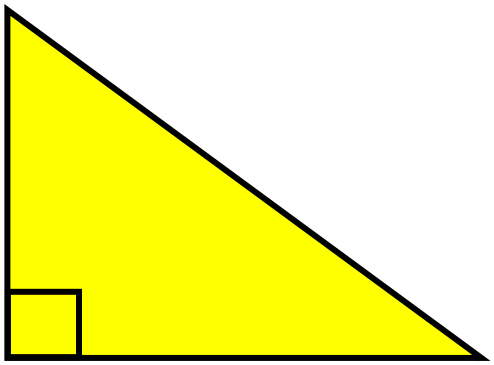
A prism with six rectangular faces where the lateral edge is perpendicular to the plane of the base.

right triangle

right triangle



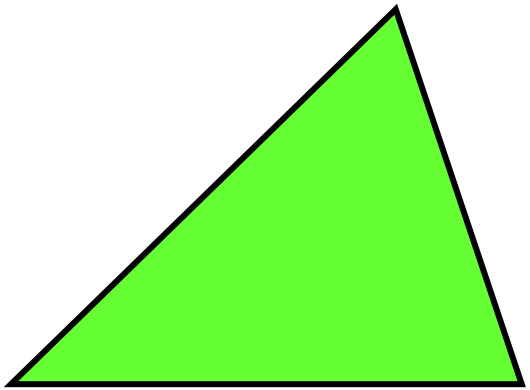
right triangle



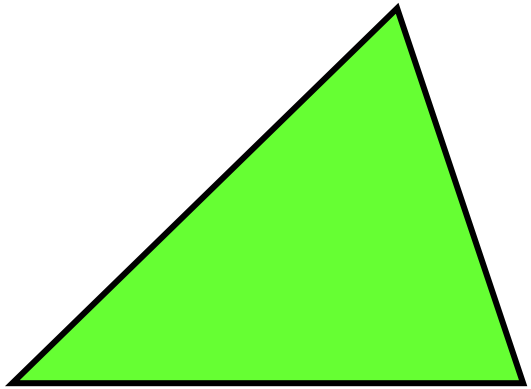
A triangle that has one 90º angle.

scalene triangle

scalene triangle



scalene triangle



A triangle that has no congruent sides.

signed number

---

signed number

-5 +8

+45 -23

---

signed number

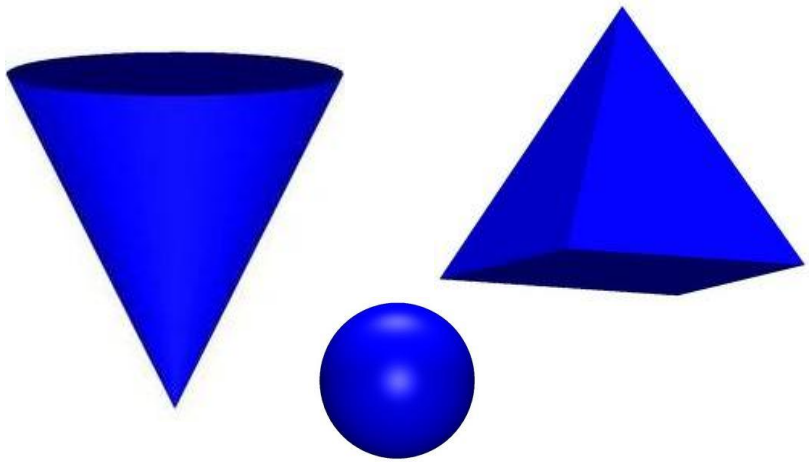
-5 +8

+45 -23

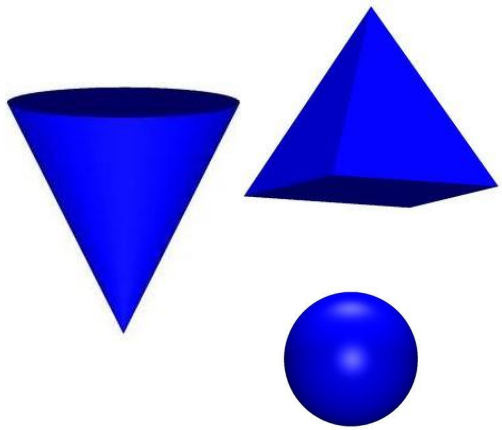
Positive or negative number.

solid figure

solid figure



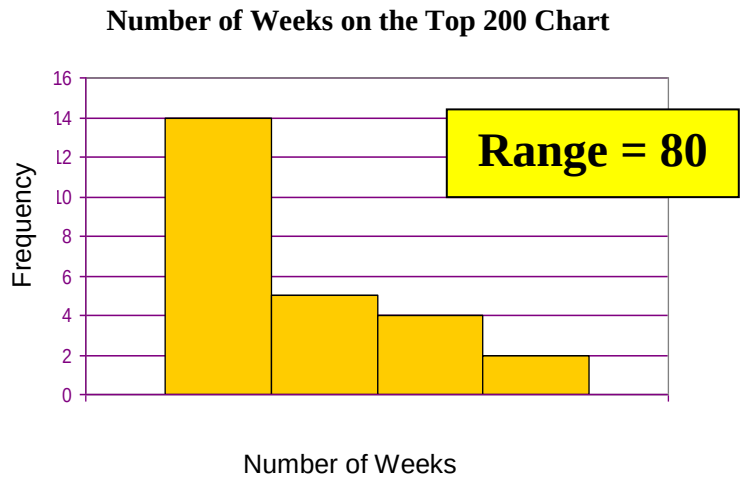
solid figure



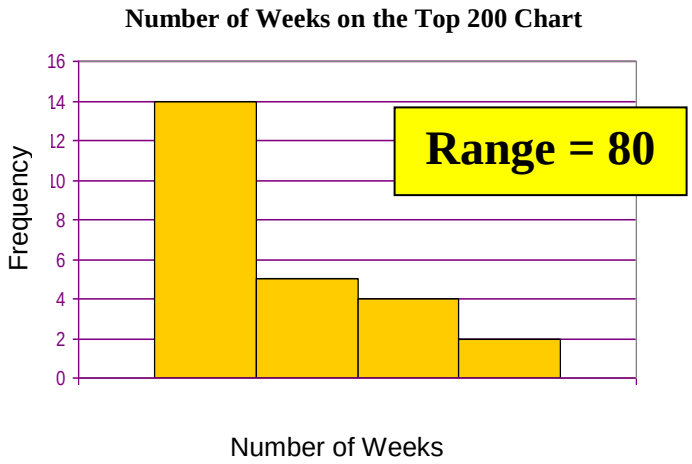
A geometric figure with 3 dimensions.

spread

spread



spread

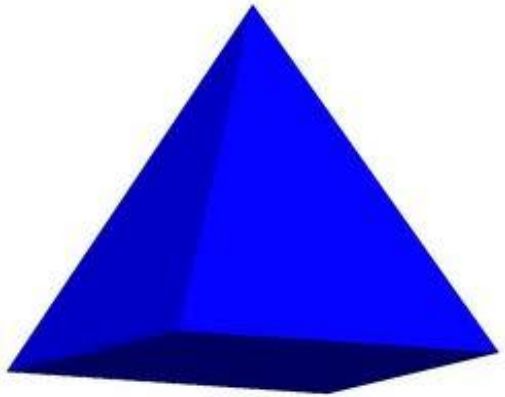


A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (Also known as measures of variation or dispersion.)

square-based pyramid

---

square-based pyramid



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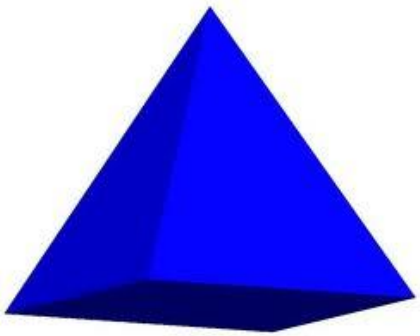
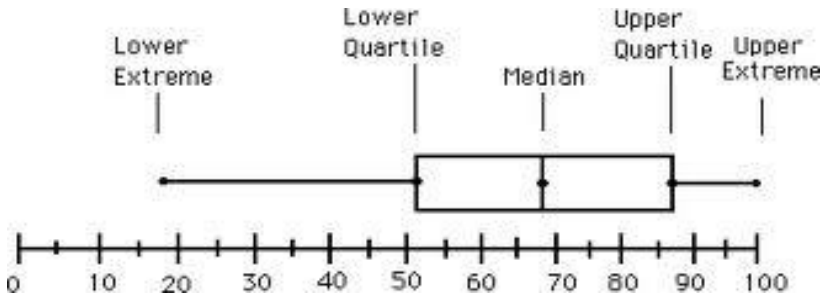
square-based pyramid



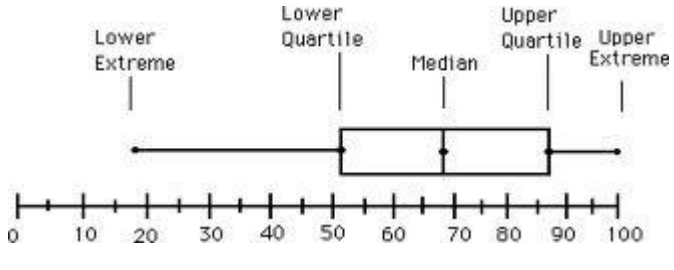
A polyhedron whose base is a square and whose other faces are triangles that share a common vertex.

statistical variability

statistical variability



statistical variability

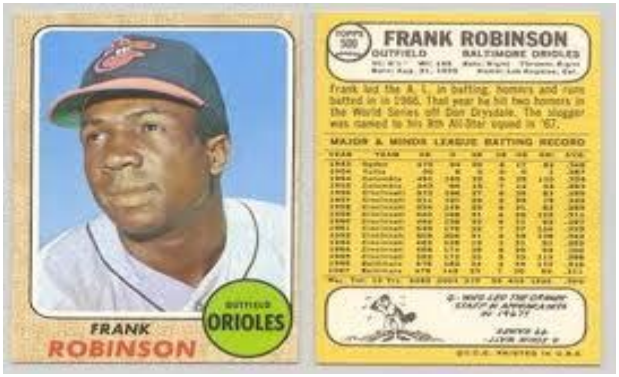


A variability or spread in a variable or a probability distribution. Common examples of measures of statistical dispersion are the variance, standard deviation, and interquartile range.

statistics

statistics

This baseball card shows statistics for a famous baseball player.



statistics

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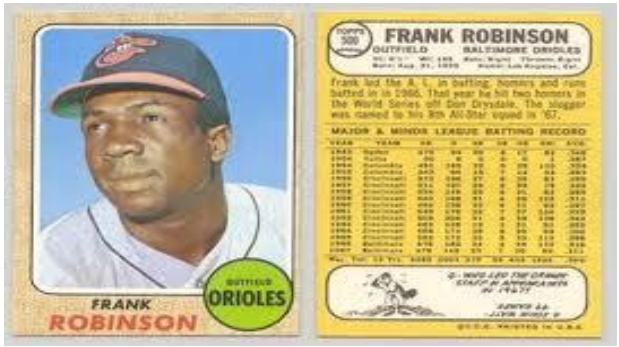


The science of collecting, organizing, representing, and interpreting data.

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

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

← **subtrahend**

---

subtrahend

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

← **subtrahend**

In subtraction, the subtrahend is the number being subtracted.

sum

---

sum

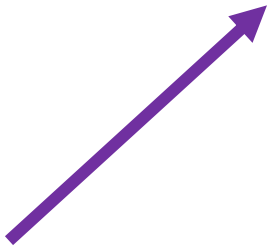
45.3 + 92.9 = 138.2

sum

---

sum

45.3 + 92.9 = 138.2

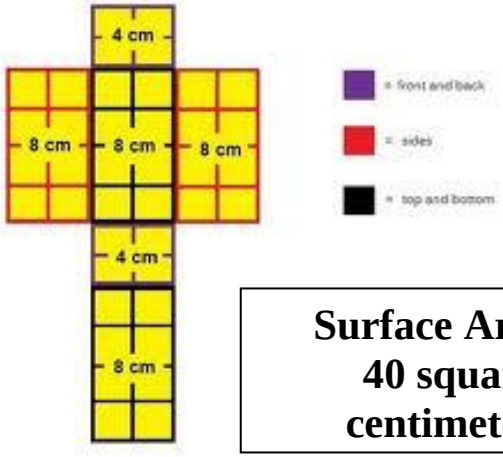


sum

The result of addition.

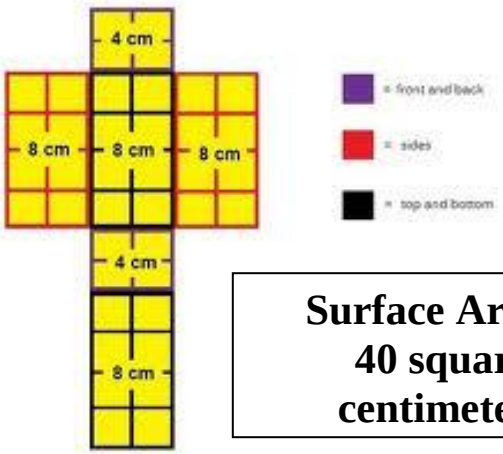
surface area

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

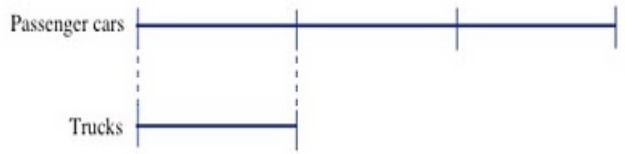
Student	Number of Books Read in the Summer
Sara	3
Jose	8
Timothy	2
Belinda	3
Gretchen	11
Trevor	7

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

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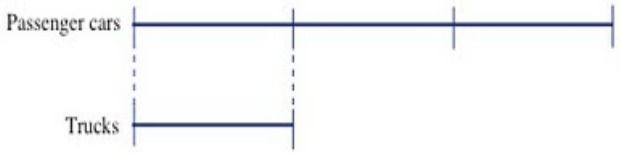


A drawing that looks like a segment of tape, used to illustrate number relationships. Also known as a strip diagram, bar model, fraction strip, or length model.

term

term

$5x + 14$

terms

term

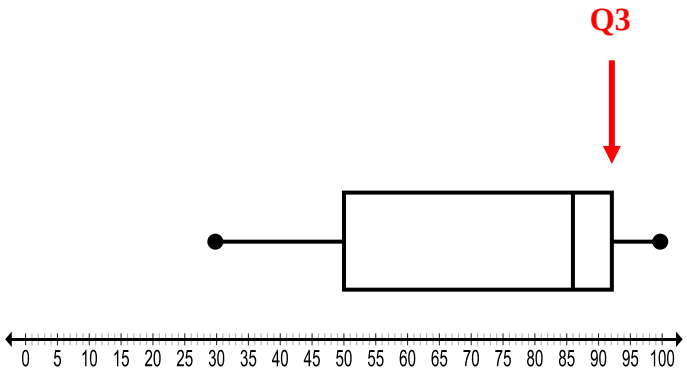
$5x + 14$

terms

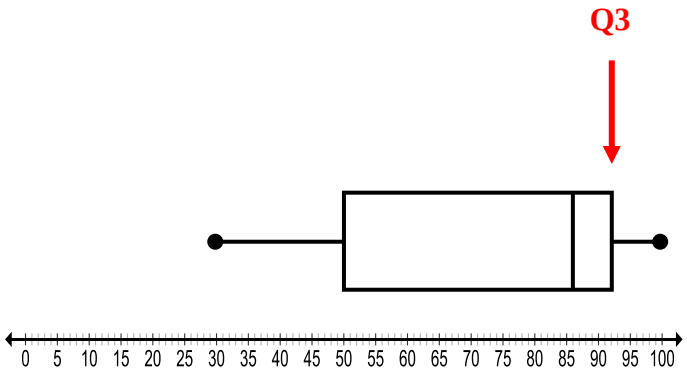
A number, variable, product, or quotient in an expression. A term is *not* a sum or difference.

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

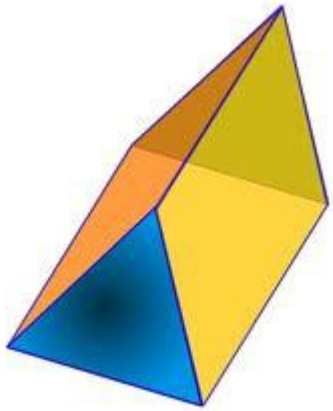
three-dimensional

three-dimensional

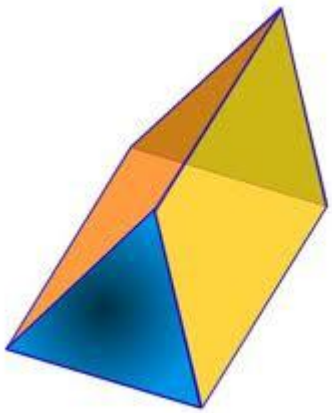
3-D. Existing in 3 dimensions; having length, width, and height.

triangular prism

triangular prism



triangular prism

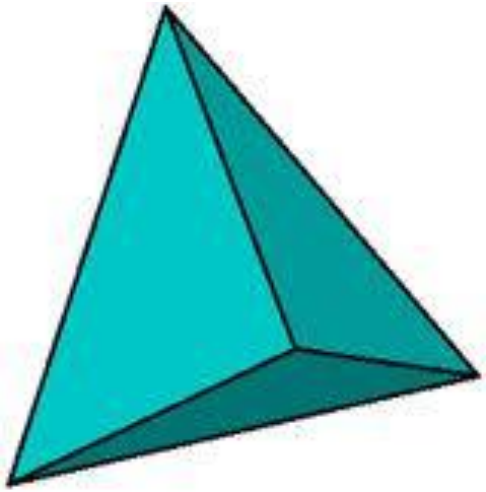


A prism with three rectangular faces and two triangular bases where the lateral edge is perpendicular to the plane of the base.

triangular pyramid

---

triangular pyramid



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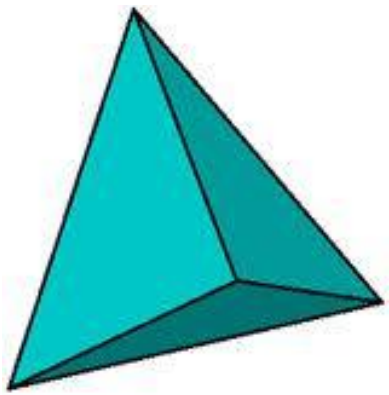
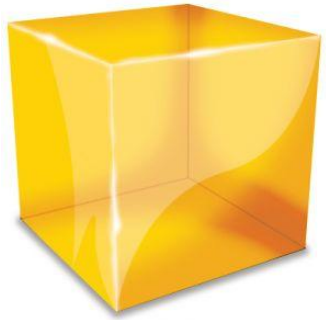
triangular pyramid

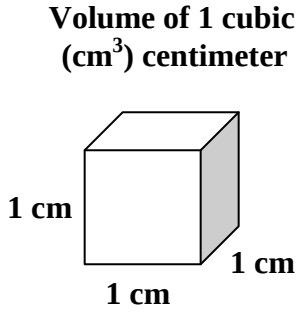


A pyramid with a triangular base.

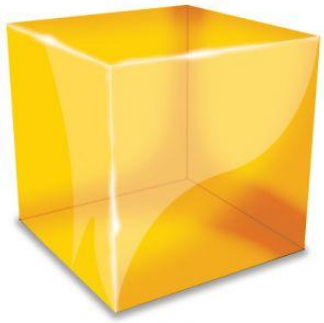
unit cube

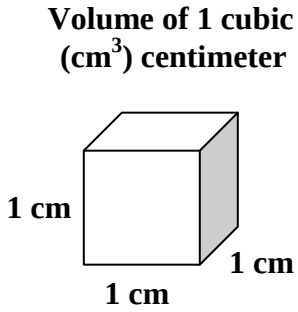
unit cube





unit cube





A precisely fixed quantity used to measure volume.

unit rate

unit rate

Cereal is $0.43 per 1 ounce.

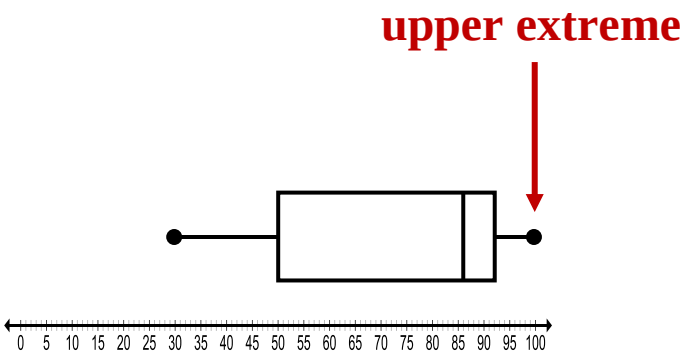
unit rate

Cereal is $0.43 per 1 ounce.

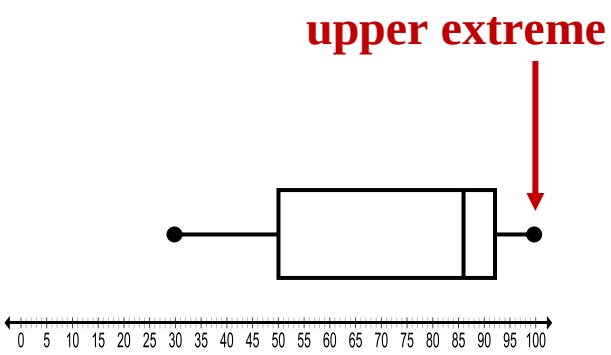
A rate with a denominator of 1.

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

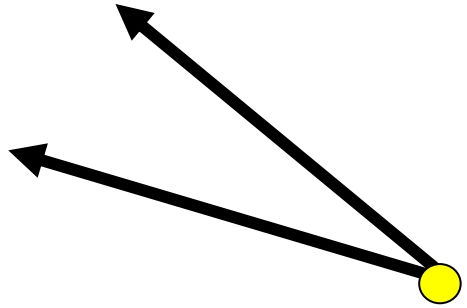
$2n + 3 = 11$

variable

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

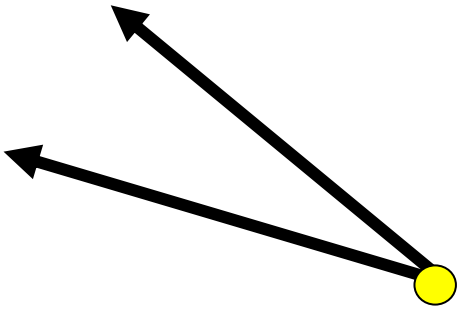
vertex

vertex



vertex

vertex



vertex

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

volume

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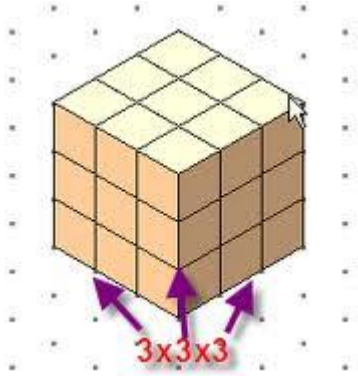
volume

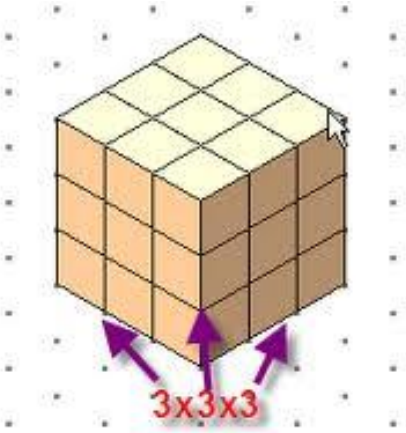


Volume =

27 cubic units

---

volume



Volume =

27 cubic units

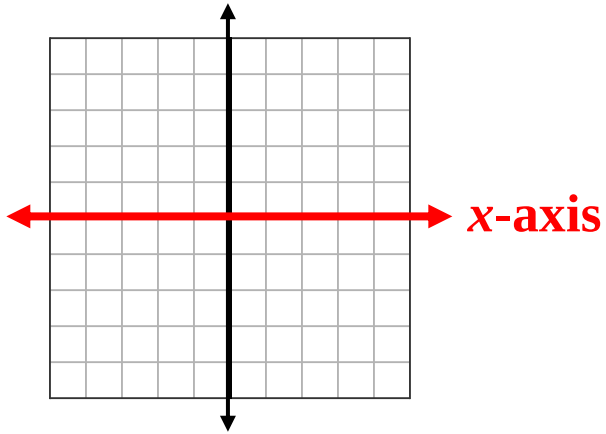
The number of cubic units it takes to fill a figure.

whole numbers

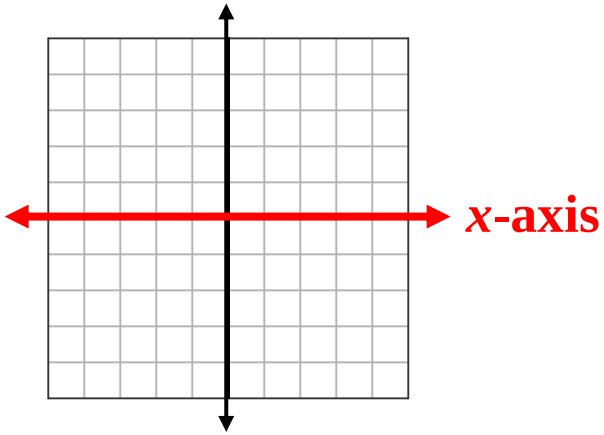
whole numbers	**0, 1, 2, 3…**	
whole numbers	**0, 1, 2, 3…**	Any of the numbers 0, 1, 2, 3, 4, 5, and so on.

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)

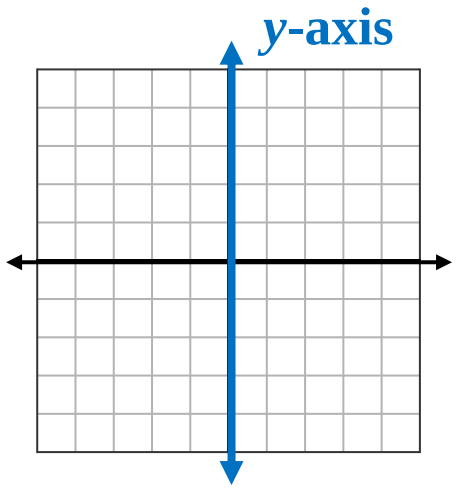
x-coordinate

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

y-axis

---

y-axis



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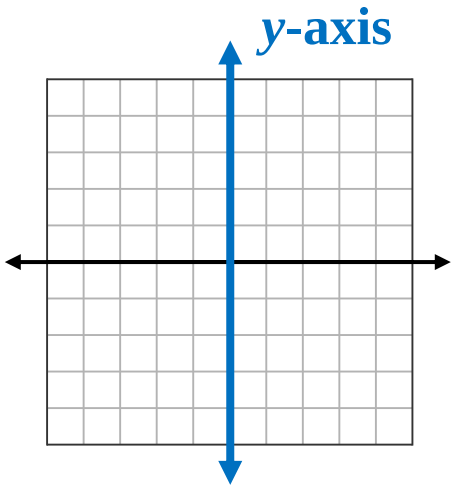
y-axis



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.