#### English 6<sup>th</sup> Grade M-Z Vocabulary Cards and Word Walls

**Revised: 4/13/18** 

#### **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:



### magnitude

Example: If this man owes \$75 on a bill, that is -\$75.

The magnitude of his debt is described as:



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

#### mass

#### mass



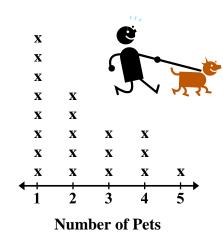
mass



The amount of matter in an object. Usually measured by comparing with an object of known mass. While gravity influences weight, it does not affect mass.

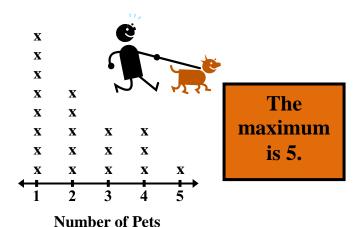
# maximum

#### maximum



The maximum is 5.

#### maximum



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

#### mean

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

mean

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

Step 2:

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

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

mean

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

Step 2:

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

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 = 488 - 74 = 14

Sten 3: Make the

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

(18 + 4 + 14)/3 = 12 is the 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

88 - 74 = 14

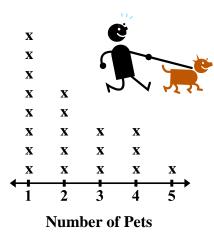
Step 3: Make the deviation "absolute" by squaring and determining the roots. (eliminate the negative)

(18 + 4 + 14)/3 = 12 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



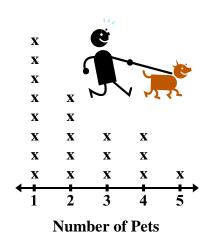
#### **Examples:**

Mode = 1

Median = 2

Mean = 2.3

#### measure of center



#### **Examples:**

Mode = 1

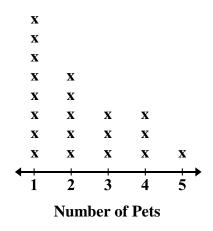
Median = 2

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 known as measure of central tendency or measure of average)

# measure of variability

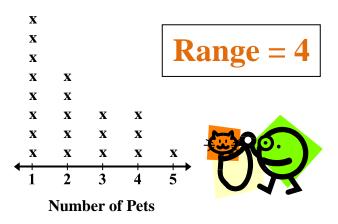
# measure of variability







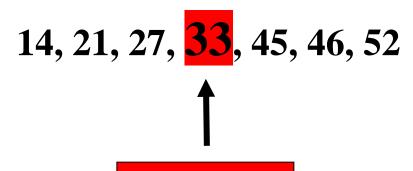
measure of variability



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

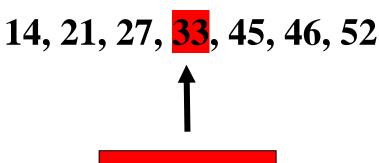
## median

### median



median

#### median



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.

# meter (m)

### meter (m)



A baseball bat is about 1 meter long.

meter (m)

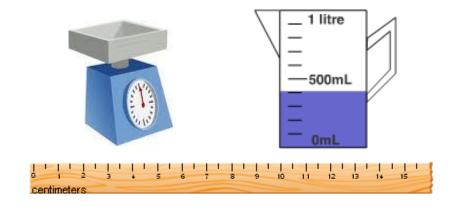


A standard unit of length in the metric system.

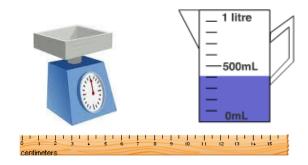
A baseball bat is about 1 meter long.

# metric system

# metric system



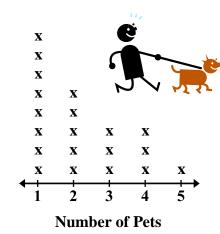
metric system



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.

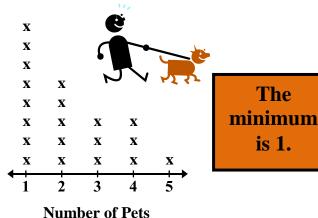
# minimum

### minimum



The minimum is 1.

minimum



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

# minuend

## minuend

$$43.2 - 27.9 = 15.3$$

minuend

#### minuend

$$43.2 - 27.9 = 15.3$$

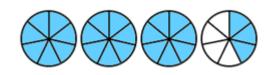
minuend

The quantity from which another quantity, the subtrahend, is to be subtracted.

# mixed number

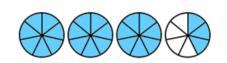
# mixed number

 $\frac{3}{7}$ 



mixed number

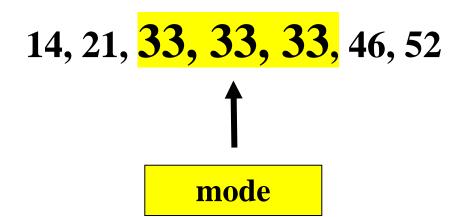
 $\frac{3}{7}$ 



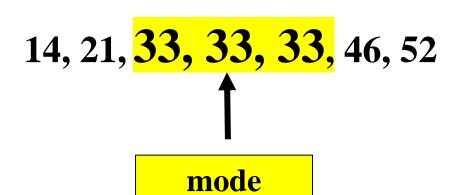
A number with an integer and a fraction part.

## mode

### mode



mode



The number or numbers that occur most often in a data set.

# multiple

# multiple



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

#### multiple

**Multiples of** 



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

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

# Multiplication Property of Equality

# Multiplication Property of Equality

$$\frac{10}{5} = 2$$

$$5 \times \frac{10}{5} = 2 \times 5$$

$$1 \times 10 = 10$$

$$10 = 10$$

Multiplication
Property of
Equality

$$\frac{10}{5} = 2$$

$$5 \times \frac{10}{5} = 2 \times 5$$

$$1 \times 10 = 10$$

$$10 = 10$$

If you multiply both sides of an equation by the same number, the two sides will remain equal.

# Multiplicative Identity Property of 1

Multiplicative
Identity
Property of 1

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

Multiplicative
Identity
Property of 1

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

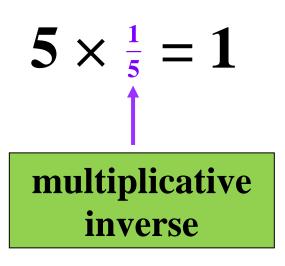
Multiplying a factor by one gives a product identical to the given factor.

### multiplicative inverse

# multiplicative inverse

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

# multiplicative inverse

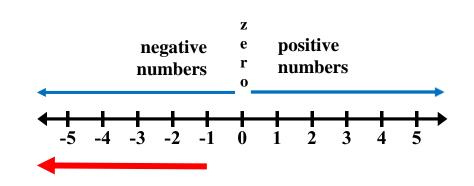


One of two numbers whose product is 1.

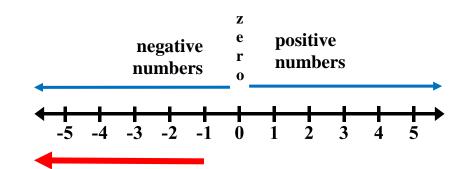
(also known as reciprocal)

# negative numbers

# negative numbers



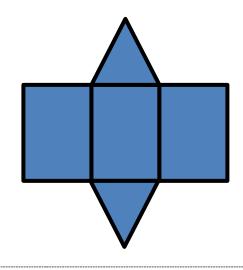
#### negative numbers



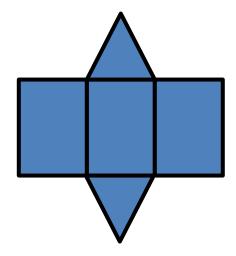
Numbers less than 0.

## net

net



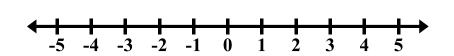
net



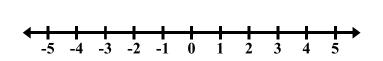
A two-dimensional shape that can be folded into a three-dimensional figure is a net of that figure. (also known as a network)

### number line

# number line



#### number line



A diagram that represents numbers as points on a line.

### numerator

numerator

3 — numerator
5

numerator

3 — numerator
5

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

## numerical expression

# numerical expression

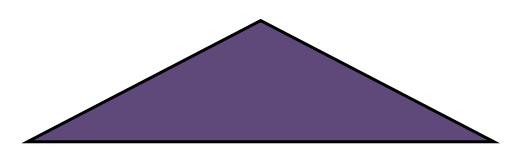
numerical expression

5+9

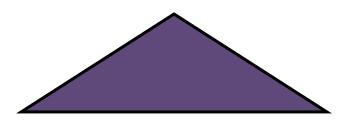
A mathematical statement including numbers and operations.

# obtuse triangle

# obtuse triangle



### obtuse triangle

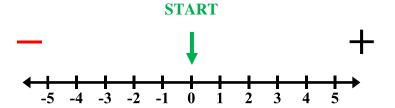


A triangle that contains one angle with a measure greater than 90° (obtuse angle) and two acute angles.

# opposites

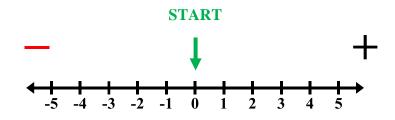
## opposites

+3 and -3 are opposites.



+3 and -3 are opposites.

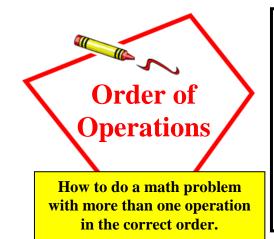
#### opposites



Having a different sign but the same numeral.

# Order of Operations

# Order of Operations



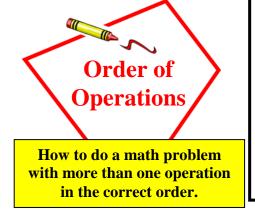
Parenthesis

Exponents

Multiply/Divide

Add/Subtract

# Order of Operations



Parenthesis

Exponents

 $M_{ultply}/D_{ivide}$ 

Add/Subtract

An order, agreed on by mathematicians, for performing operations to simplify expressions.

# ordered pair

ordered pair

$$(-5, 2)$$

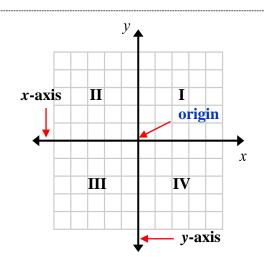
ordered pair

$$(-5, 2)$$

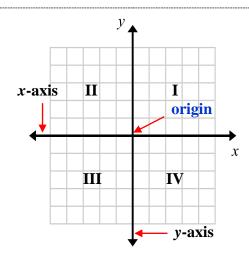
A pair of numbers that gives the coordinates of a point on a grid in this order (horizontal coordinate, vertical coordinate). (also known as a coordinate pair)

# origin

# origin



origin



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

# ounce (oz)

# ounce (oz)



A strawberry weighs about 1 ounce.

ounce (oz)

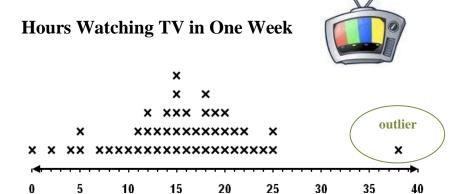


A customary unit of weight equal to one sixteenth of a pound. 16 ounces = 1 pound

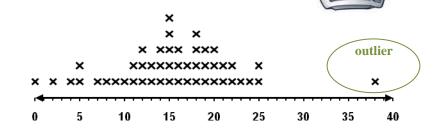
A strawberry weighs about 1 ounce.

## outlier

#### outlier



#### outlier

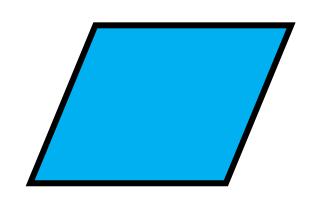


**Hours Watching TV in One Week** 

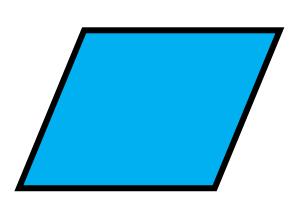
A number in a set of data that is much larger or smaller than most of the other numbers in the set.

# parallelogram

### parallelogram



parallelogram



A quadrilateral with 2 pairs of parallel and congruent sides.

# pattern

### pattern



blue stars	2	4	6	8	10
red stars	1	2	3	4	5

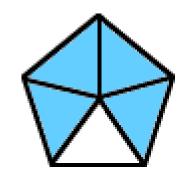
#### pattern

$\checkmark$					<b>★</b>	
	blue stars	2	4	6	8	10
	red stars	1	2	3	4	5

A repeating or growing sequence. An ordered set of numbers arranged according to a rule.

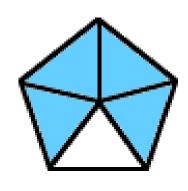
# percent

### percent



80% of the pentagon is shaded.

percent

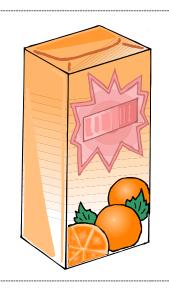


80% of the pentagon is shaded.

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

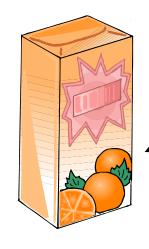
# pint (pt)

pint (pt)



The orange juice carton holds 1 pint.

pint (pt)



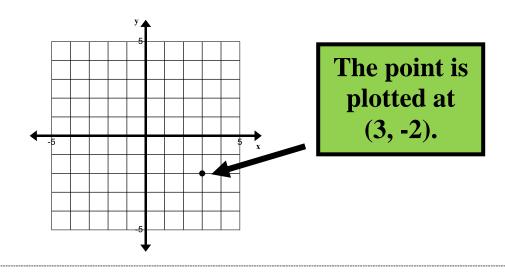
The orange juice carton holds 1 pint.

A customary unit of capacity.

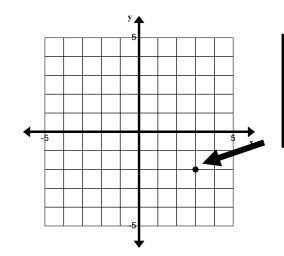
1 pint = 2 cups

# plot

### plot



plot

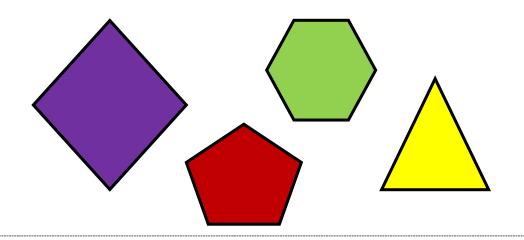


The point is plotted at (3, -2).

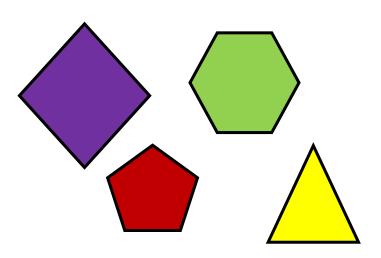
To place points on a graph or coordinate plane.

# polygon

## polygon



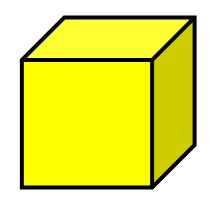
polygon



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

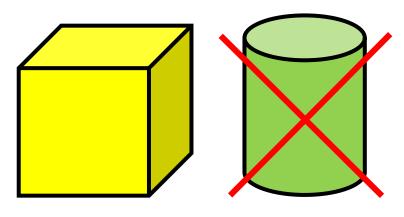
# polyhedron

## polyhedron





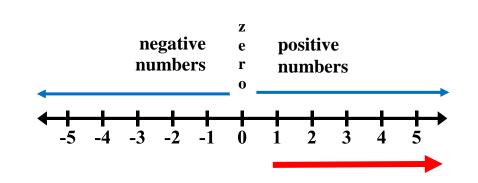
polyhedron



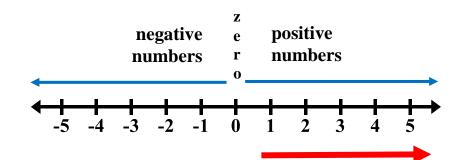
A three-dimensional figure in which all the faces are polygons. Polyhedrons have **no** curved surfaces.

## positive numbers

# positive numbers



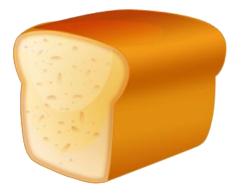
#### positive numbers



Numbers that are greater than zero.

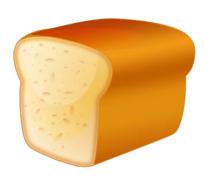
# pound (lb)

### pound (lb)



A loaf of bread weighs about 1 pound.

#### pound (lb)



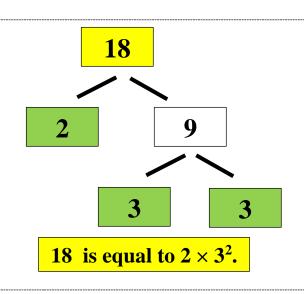
A customary unit of weight.

1 pound = 16 ounces

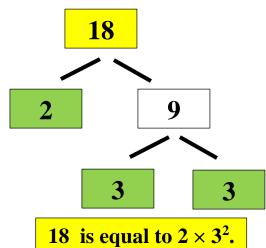
A loaf of bread weighs about 1 pound.

## prime factorization





prime factorization



The expression of a number as the product of its prime factors.

# prime number

## prime number

$$1 \times 5 = 5$$

5 is a prime number.

#### prime number

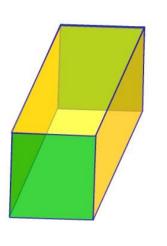
$$1\times 5=5$$

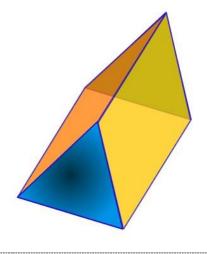
5 is a prime number.

A whole number greater than 0 that has exactly two different factors, 1 and itself.

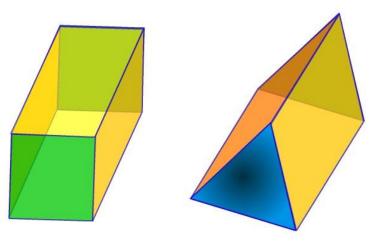
# prism

## prism





prism



A three-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 × 3 \$29.85 †

product

product



Sunglasses are \$9.95 a pair.



The result of multiplication.

# proportion

### proportion



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

#### proportion

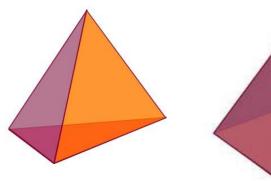


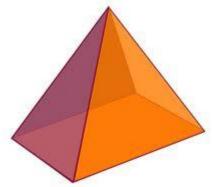
An equation showing that two ratios are equivalent.

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

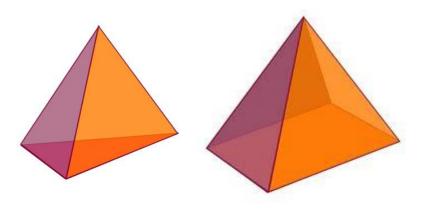
# pyramid

## pyramid





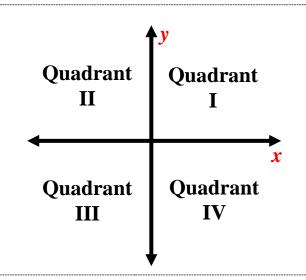
pyramid



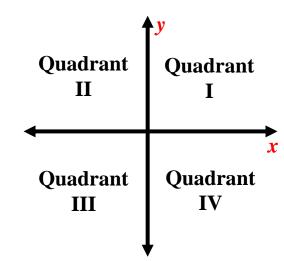
A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.

# quadrants

## quadrants



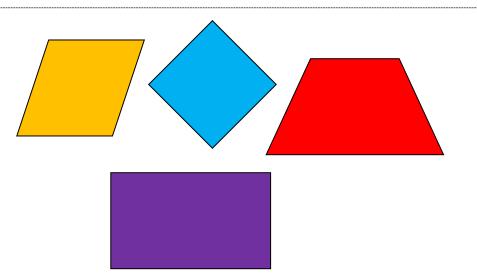
#### quadrants



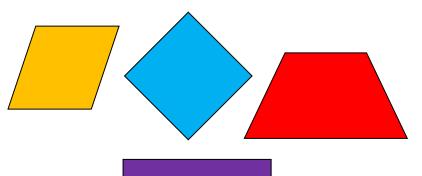
The four sections of a coordinate grid that are separated by the axes.

# quadrilateral

quadrilateral



quadrilateral



A polygon with 4 sides.

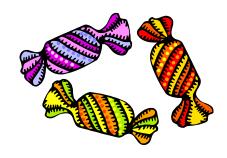
# quantity

## quantity



3 candies for 5 cents.

quantity

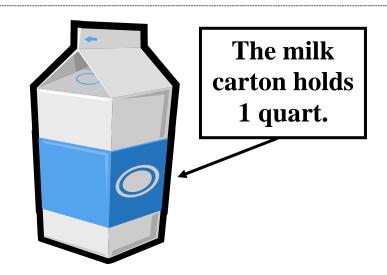


3 candies for 5 cents.

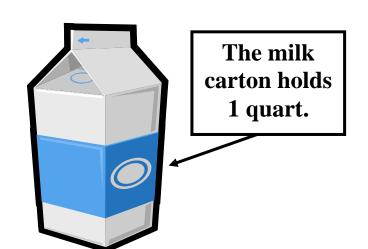
An amount.

# quart (qt)

quart (qt)



quart (qt)

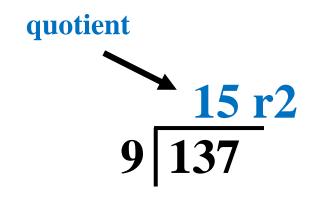


A customary unit of capacity.

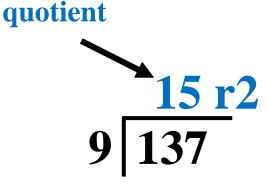
1 quart = 2 pints or 1 quart = 4 cups

# quotient

## quotient



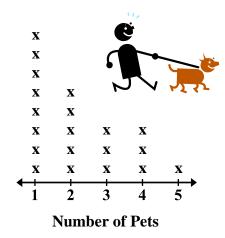
quotient



The result of the division of one quantity by another.

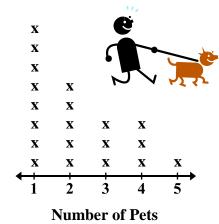
## range

#### range



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

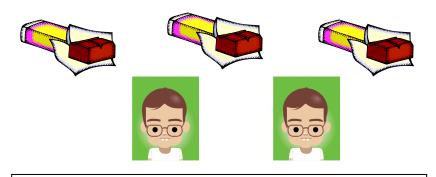


The car was traveling 65 miles per hour on the freeway.

A ratio comparing two different units.

## ratio

#### ratio



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

#### ratio

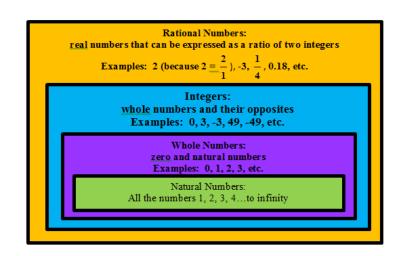


The ratio of chocolate bars to boys is 3:2.

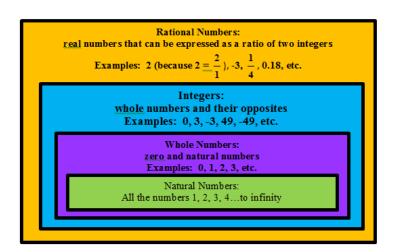
A comparison of two numbers using division.

## rational number

## rational number



#### rational number



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

# reciprocal

## reciprocal

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

reciprocal

#### reciprocal

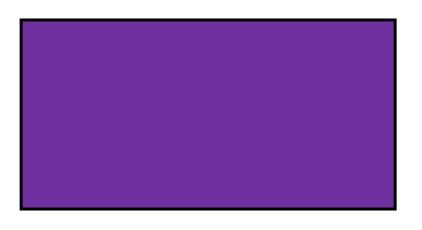
$$5 \times \frac{1}{5} = 1$$
reciprocal

One of two numbers whose product is 1.

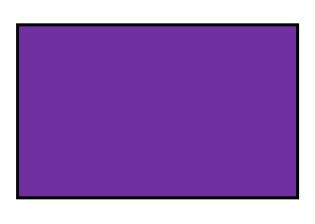
(also known as multiplicative inverse)

## rectangle

### rectangle



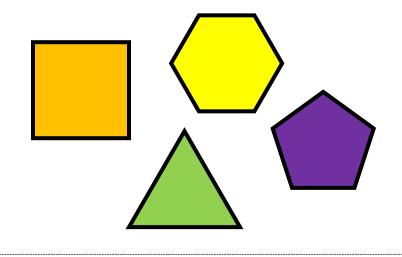
rectangle



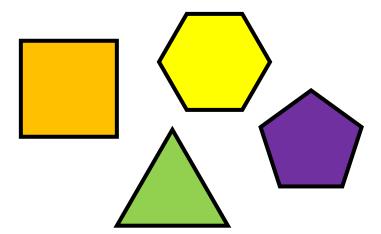
A quadrilateral with 2 pairs of congruent, parallel sides and 4 right angles.

## regular polygon

# regular polygon



regular polygon



A polygon with all sides the same length and all angles the same measure.

## relative frequency table

relative frequency table



Spe

ing

Spelling Test Scores		
Scores	Frequency	Relative
		Frequency
0-5	1	5%
6-10	3	15%
11-15	7	35%
16-20	9	45%

relative frequency table



**Spelling Test Scores** Relative **Scores Frequency** Frequency 0-56-10 15% 3 11-15 35% 16-20 45%

5%

A table which shows the percent of time each data item or group of data occurs.

## repeating decimal

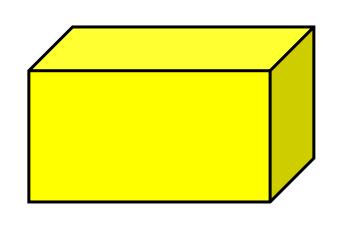
# repeating decimal

# repeating decimal

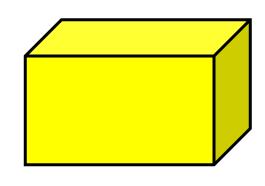
A decimal which has repeating digits or a repeating pattern of digits.

### right rectangular prism

# right rectangular prism



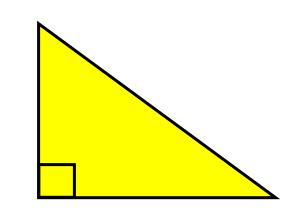
right rectangular prism



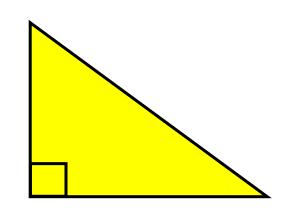
A prism with 6 rectangular faces where the lateral edge is perpendicular to the plane of the base.

# right triangle

## right triangle



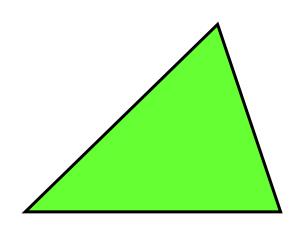
right triangle



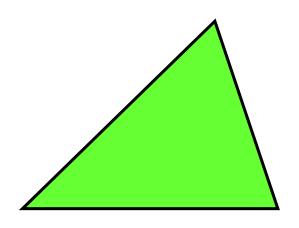
A triangle that has one 90° angle.

# scalene triangle

## scalene triangle



scalene triangle



A triangle that has no congruent sides.

# signed number

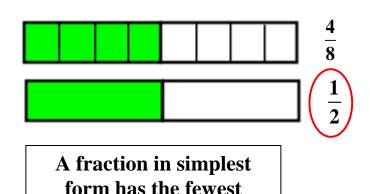
signed number

signed number

Positive or negative number.

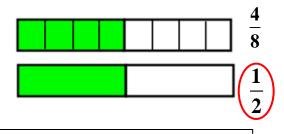
# simplest form

# simplest form



possible pieces.

simplest form



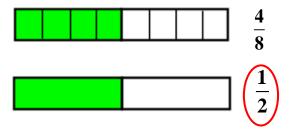
A fraction in simplest form has the fewest possible pieces. A fraction is in simplest form when the greatest common factor of the numerator and denominator is 1.

# simplify

## simplify



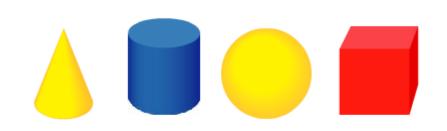
simplify



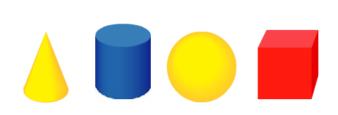
To express a fraction in simplest form.

# solid figure

# solid figure



solid figure



Three-dimensional figure that has length, width, and height.

## solution of an equation

# solution of an equation

$$18 = x + 11$$
$$x = 7$$

$$18 = x + 11$$

$$x = 7$$

The value of a variable that makes the equation true.

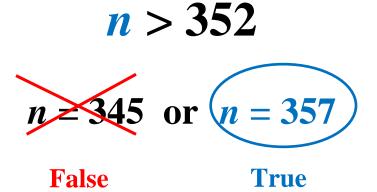
### solution of an inequality

# solution of an inequality

$$n > 352$$

$$n \ge 345 \text{ or } (n = 357)$$
False True

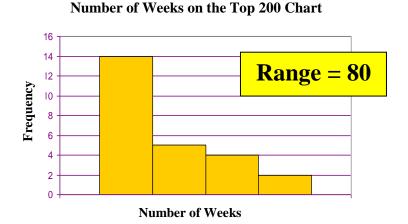
solution of an inequality



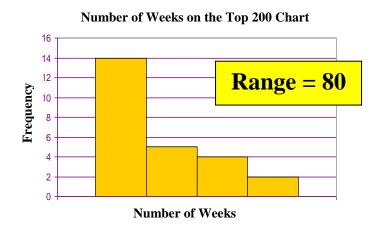
The value of a variable that makes the inequality true.

# spread

### spread



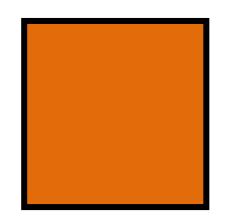
#### spread



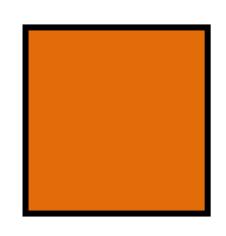
A measure of how much a collection of data is spread out. Commonly used types include range and quartiles. (also known as measure of variability)

## square

#### square



square



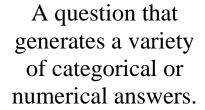
A parallelogram with 4 equal angles AND 4 equal sides.

## statistical question

# statistical question

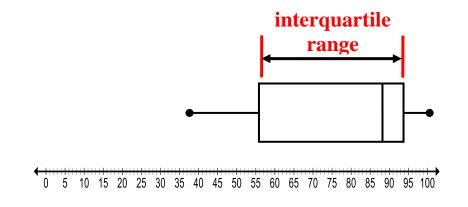
How many pencils does each student in our class have in his or her desk?

statistical question How many pencils does each student in our class have in his or her desk?

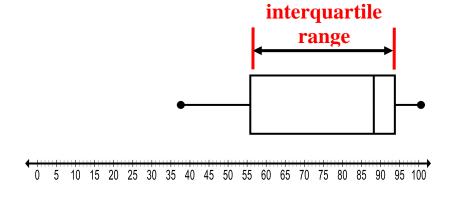


## statistical variability

# statistical variability



statistical variability

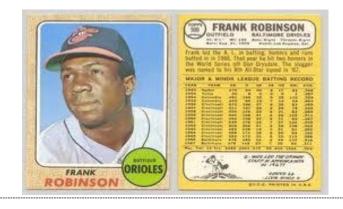


A spread in the distribution of data. An example is the interquartile range.

## statistics

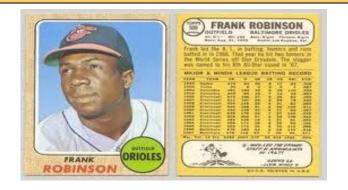
statistics

This baseball card shows statistics for a famous baseball player.



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.

# Subtraction Property of Equality

# Subtraction Property of Equality

$$9 + 7 = 16$$
 $9 + 7 - 7 = 16 - 7$ 
 $9 + 0 = 9$ 
 $9 = 9$ 

Subtraction Property of Equality

$$9 + 7 = 16$$
 $9 + 7 - 7 = 16 - 7$ 
 $9 + 0 = 9$ 
 $9 = 9$ 

If you subtract the same number from both sides of an equation, the two sides will remain equal.

## subtrahend

#### subtrahend

subtrahend

In subtraction, the subtrahend is the number being subtracted.

#### sum

sum

$$45.3 + 92.9 = 138.2$$

sum

$$45.3 + 92.9 = 138.2$$

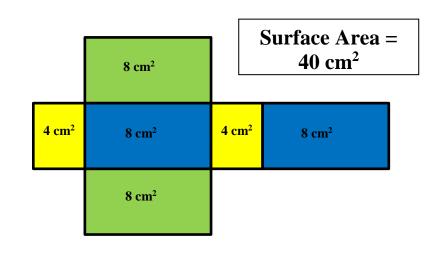
sum

The result of addition.

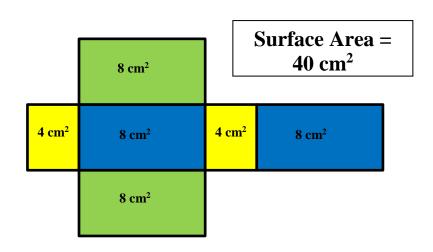
sum

## surface area

### surface area



#### surface area



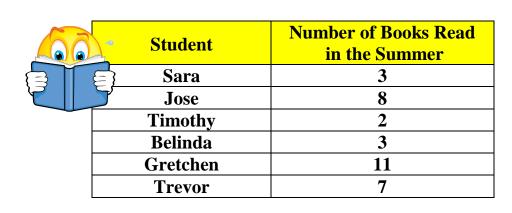
The total area of the faces (including the bases) and curved surfaces of a solid figure.

### table

#### table

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

#### table



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?





passenger cars

trucks

tape diagram

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



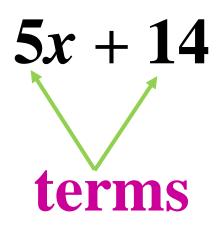


passenger cars trucks

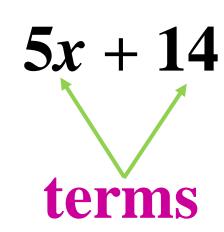
A drawing that looks like a segment of tape, used to illustrate number relationships. (also known as a strip diagram, bar model, fraction strip, or length model)

#### term

#### term



term



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

## terminating decimal

# terminating decimal

$$\frac{1}{4} = 0.25$$

$$\frac{1}{5} = 0.2$$

$$\frac{1}{8} = 0.125$$

$$\frac{1}{10} = 0.1$$

# terminating decimal

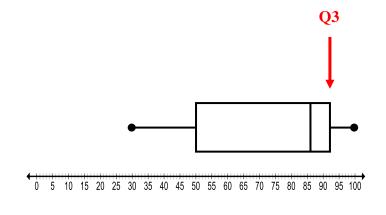
$$\frac{1}{4} = 0.25 \qquad \frac{1}{5} = 0.2$$

$$\frac{1}{8} = 0.125 \qquad \frac{1}{10} = 0.1$$

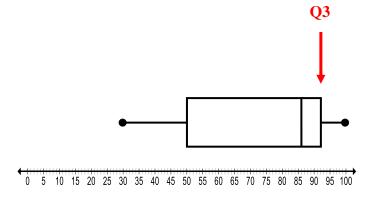
A decimal which has a finite number of digits.

## third quartile

## third quartile



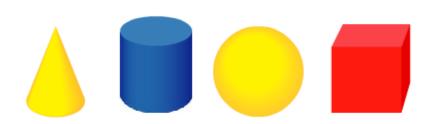
#### third quartile



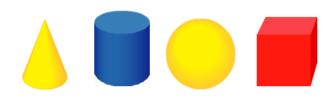
The third quartile is the middle (the median) of the upper half of the data on a box plot. One-fourth of the data lies above the third quartile and three-fourths lies below. (also known as Q3 or upper quartile)

# three-dimensional figure

threedimensional figure



threedimensional figure



A solid figure that has length, width, and height.

## ton (T)

ton (T)



A small car weighs about 1 ton.

ton (T)



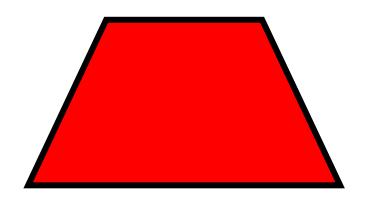
A small car weighs about 1 ton.

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

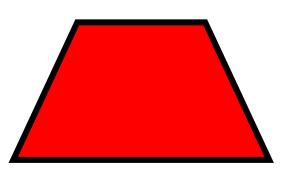
A metric ton (t) is a unit of mass equal to 1,000 kilograms (about 2,200 pounds).

# trapezoid

## trapezoid



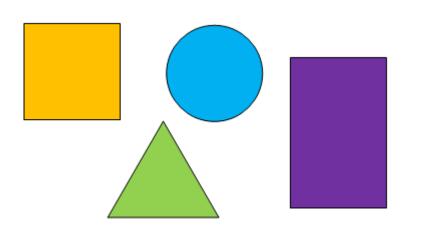
trapezoid



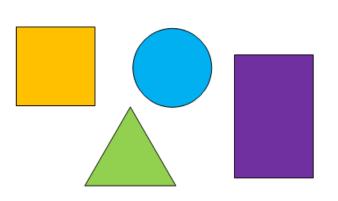
A quadrilateral with at least one pair of parallel sides.

# two-dimensional figure

twodimensional figure



twodimensional figure



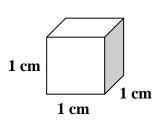
A plane, flat figure that has length and width.

## unit cube

#### unit cube



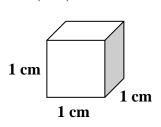
Volume of 1 cubic (cm<sup>3</sup>) centimeter



#### unit cube



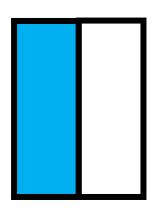
Volume of 1 cubic (cm<sup>3</sup>) centimeter



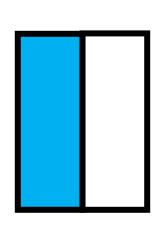
A precisely fixed quantity used to measure volume.

## unit fraction

unit fraction 12



unit fraction **1 2** 



A fraction that has 1 as its numerator. A unit fraction names 1 equal part of a whole.

## unit rate

#### unit rate

Cereal is \$0.43 per 1 ounce.



unit rate

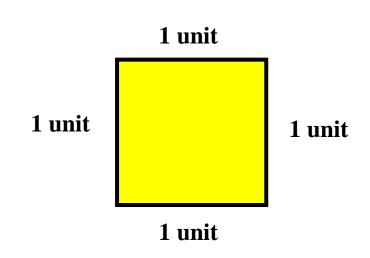
Cereal is \$0.43 per 1 ounce.



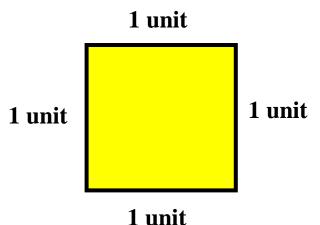
A rate with a denominator of 1.

# unit square

unit square



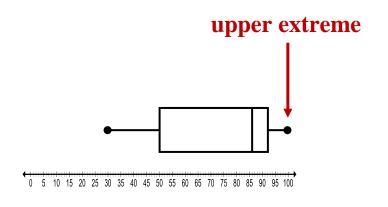
unit square



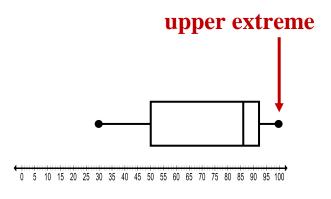
A square with side lengths of 1 unit each. It has an area of 1 square unit.

## upper extreme

# upper extreme



upper extreme

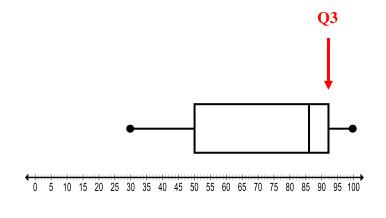


The greatest or largest number out of a data set, usually farther away from interquartile range than other data in set.

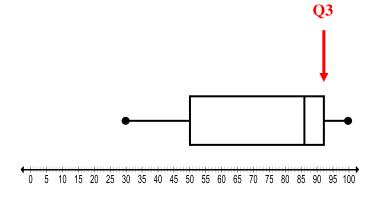
(also known as maximum)

## upper quartile

## upper quartile



upper quartile



The upper 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 upper quartile and three-fourths lies below. (also known as Q3 or third quartile)

## value

#### value

$$5x - 2 = 23$$

The value of x is 5.

$$5x - 2 = 23$$

#### value

The value of x is 5.

The amount something is worth.

#### variable

#### variable

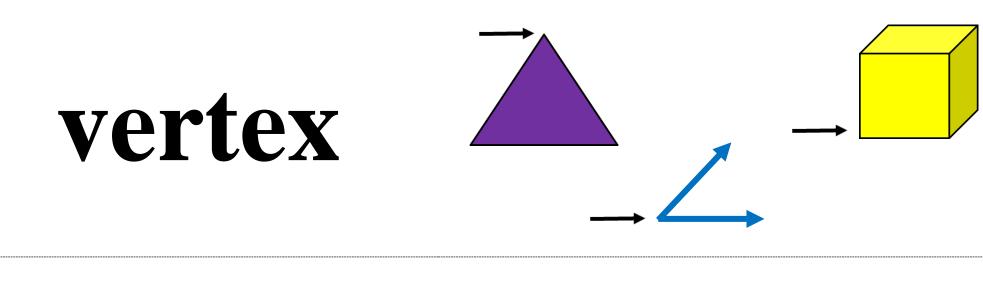
$$2n + 3 = 11$$
variable

variable

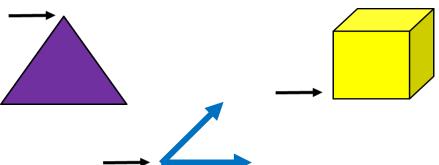
$$2n + 3 = 11$$
variable

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

#### vertex



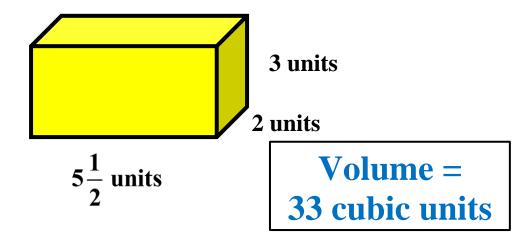
vertex



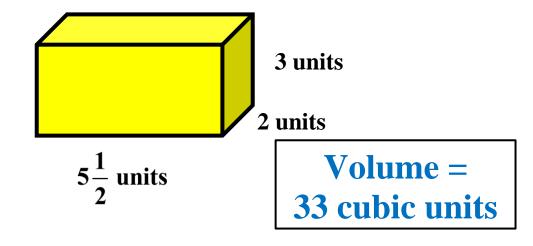
The point at which two line segments, lines, or rays meet to form an angle. (plural - vertices)

## volume

#### volume



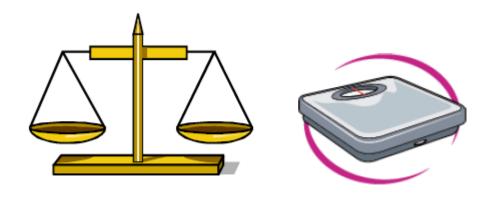
volume



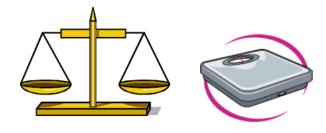
The number of cubic units it takes to fill a figure.

# weight

## weight



weight



The measure of how heavy something is.

#### whole numbers

# whole numbers

0, 1, 2, 3...

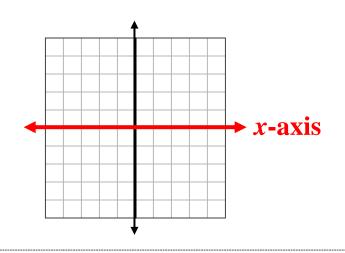
whole numbers

0, 1, 2, 3...

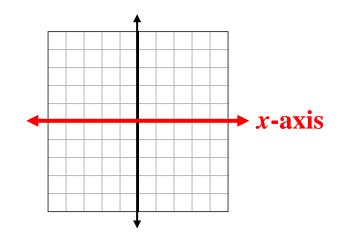
Whole numbers are 0 and the counting numbers 1, 2, 3, and so on.

## x-axis

x-axis



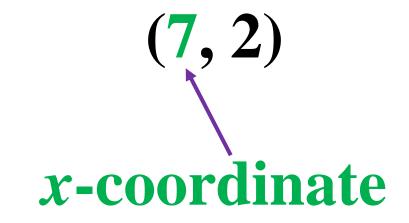
x-axis



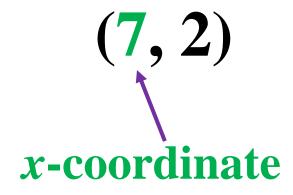
In a Cartesian grid, the horizontal axis.

### x-coordinate

#### x-coordinate



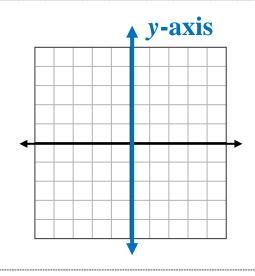
x-coordinate



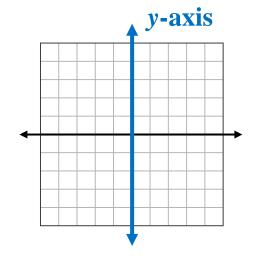
In an ordered pair, the value that is always written first.

# y-axis

y-axis



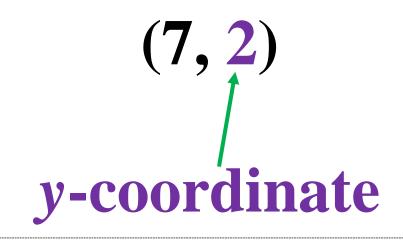
y-axis



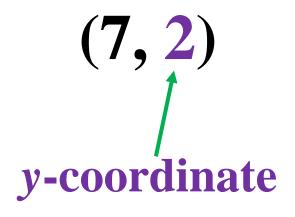
In a Cartesian grid, the vertical axis.

# y-coordinate

y-coordinate



y-coordinate



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

