

# Vocabulary Cards and Word Walls

## 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:

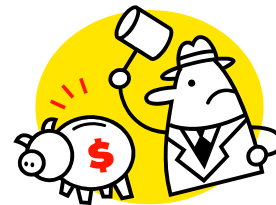
$$|-\$75| = \$75$$



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.

# mean

---

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

Step 1:

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

Step 2:

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

---

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

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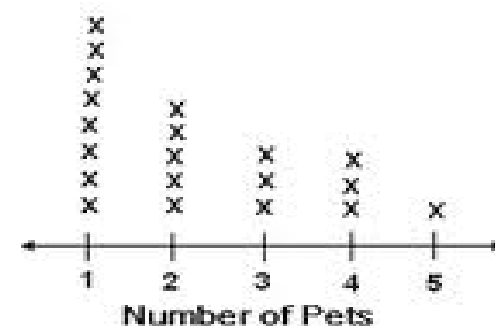
Step 3: Make the deviation 'absolute' by squaring and determining the roots. (eliminate the negative)

$(18 + 4 + 16)/3 = 12.67$  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



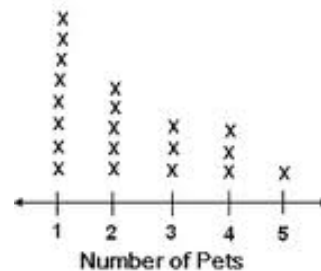
Examples:

Mode = 1

Median = 2

Mean = 2.3

## measure of center



Examples:

Mode = 1

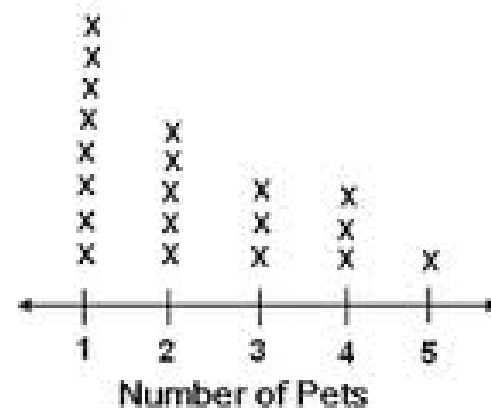
Median = 2

Mean = 2.3

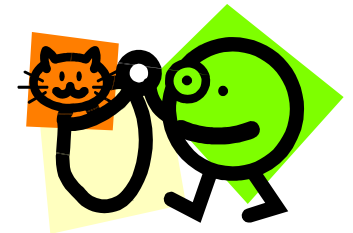
An average; a single value that is used to represent a collection of data. Three commonly used types of averages are mode, median, and mean. (Also called measures of central tendency or measures of average.)

# measure of variation

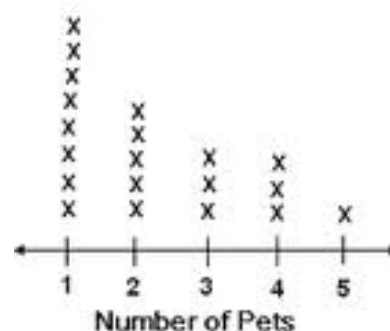
## measure of variation



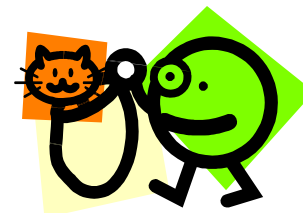
Range = 4



## 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

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## median

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



median

## median

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



median

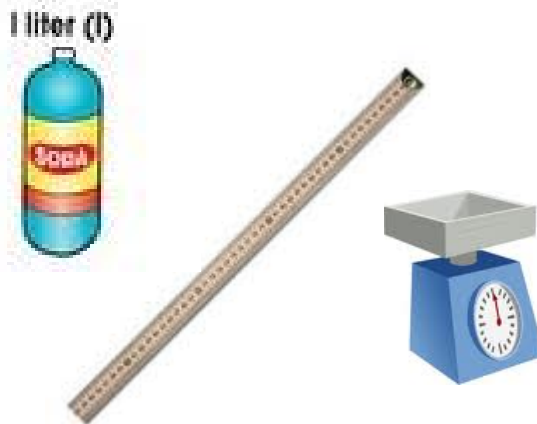
The middle number of a set of numbers when the numbers are arranged from least to greatest, or the mean of two middle numbers when the set has two middle numbers.

# 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.



# minuend

---

## minuend

$$43.2 - 27.9 = 15.3$$

minuend

$$43.2 - 27.9 = 15.3$$

## minuend

minuend

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

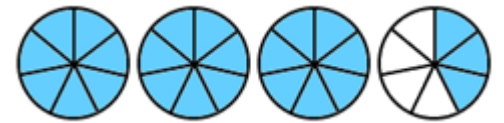
# mixed number

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Example:

mixed  
number

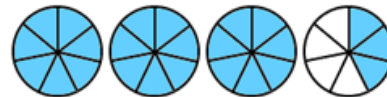
$$3\frac{3}{7}$$



Example:

mixed  
number

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



A number with an integer  
and a fraction part.

# multiple

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Example:

## multiple

Multiples of



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

---

Example:

## multiple

Multiples of

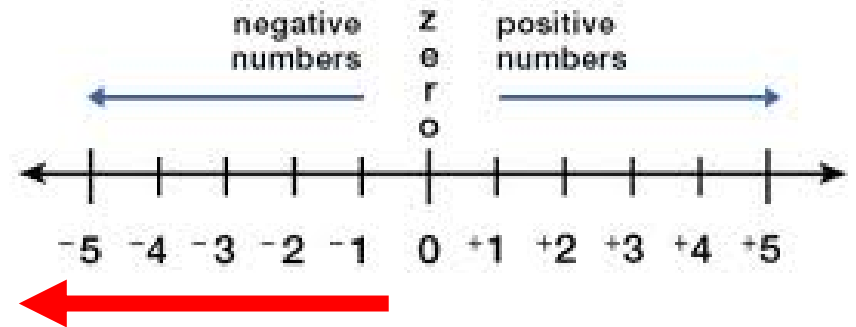


7, 14, 21, 28, 35, 42, 49...

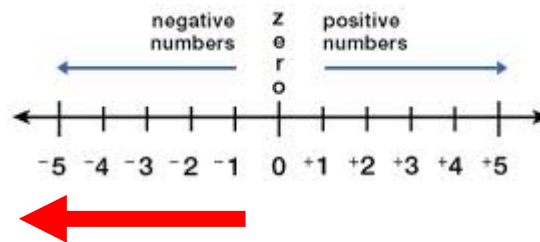
The product of a whole number and any other whole number.

# negative numbers

negative  
numbers



negative  
numbers

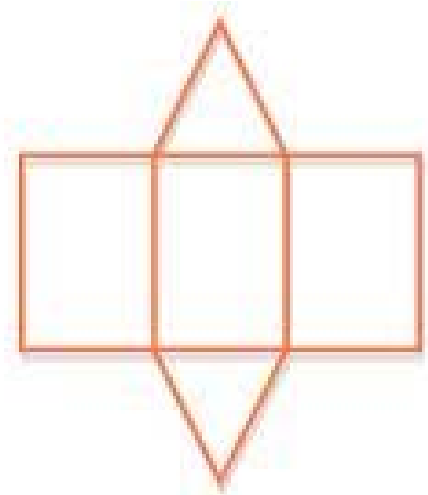


Numbers less than 0.

# net

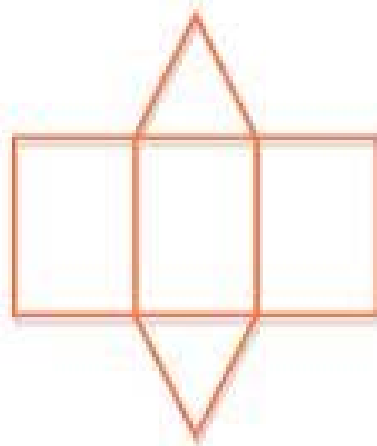
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## net



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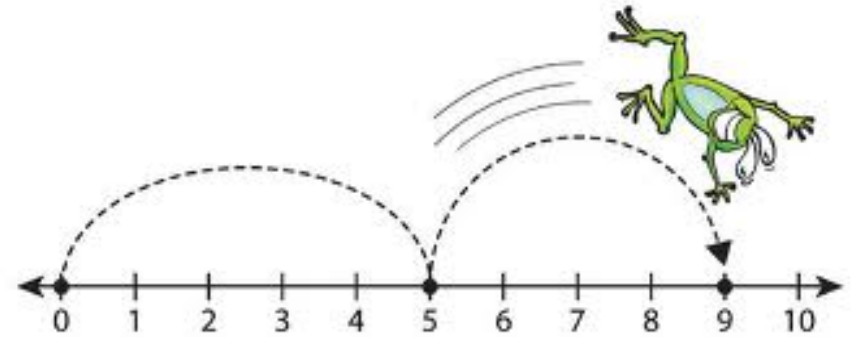
## net



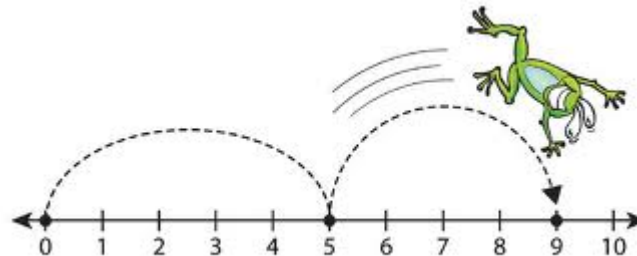
A 2-dimensional shape that can be folded into a 3-dimensional figure is a net of that figure. (Also called a network.)

# number line

number  
line



number  
line

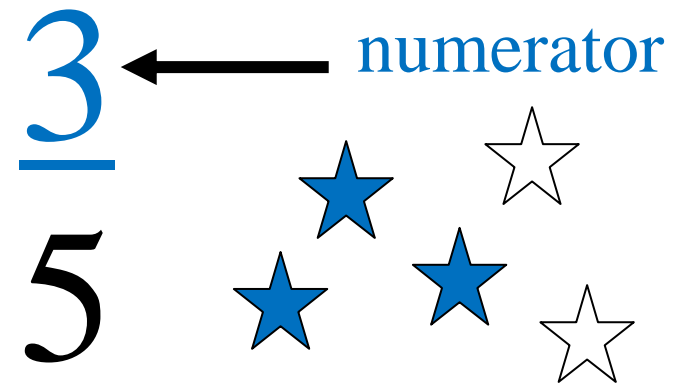


A diagram that  
represents numbers  
as points on a line.

# numerator

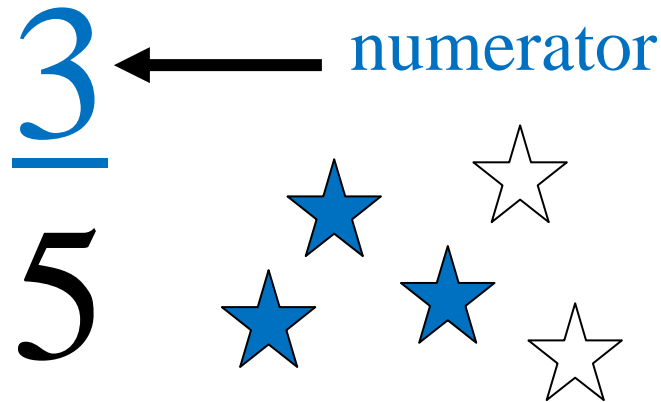
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## numerator



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## numerator



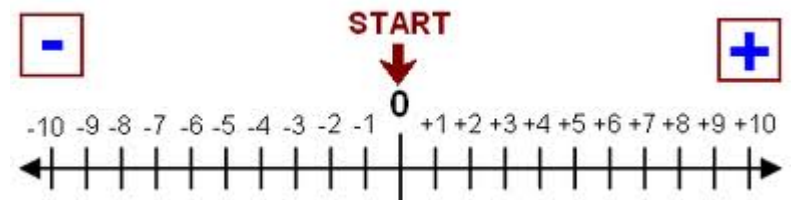
The number or  
expression written  
above the line in a  
fraction.

# opposite

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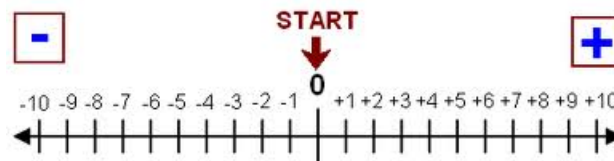
+3 and -3 are opposites.

# opposite



+3 and -3 are opposites.

# opposite

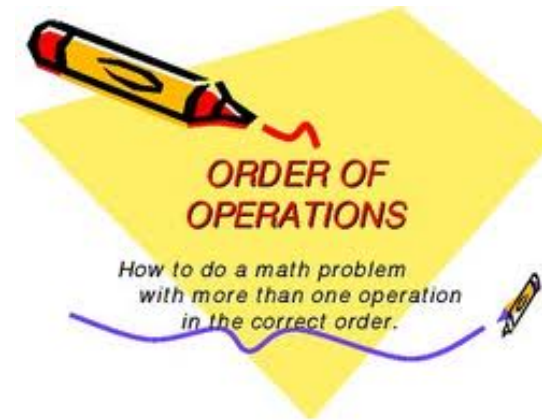


Having a different  
sign but the same  
numeral.



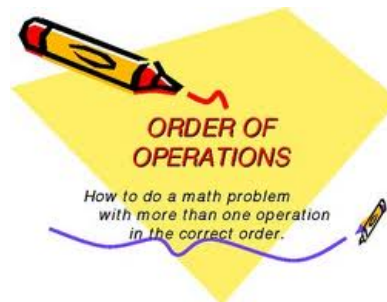
# Order of Operations

## Order of Operations



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

## Order of Operations



<b>P</b> arenthesis
<b>E</b> xponents
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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

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

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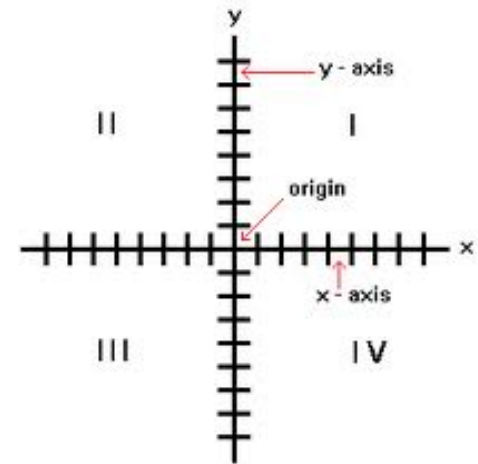
ordered pair

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

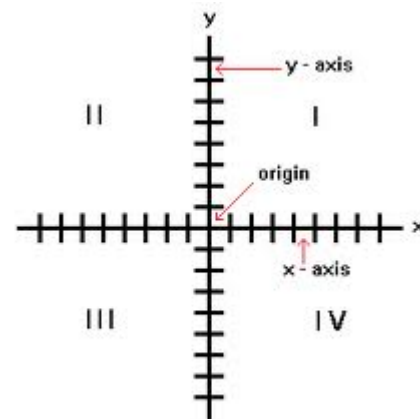
A pair of numbers  
that gives the  
coordinates of a  
point on a grid in  
this order (horizontal  
coordinate, vertical  
coordinate).

# origin

# origin



# origin

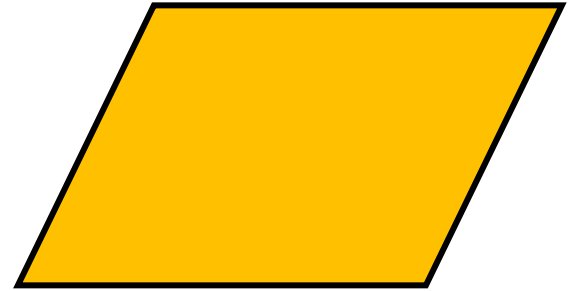


The intersection of the x- and y-axes in a coordinate plane, described by the ordered pair  $(0, 0)$ .

# parallelogram

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parallelogram



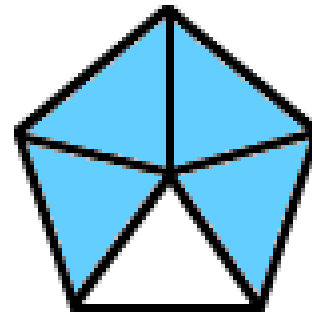
parallelogram



A quadrilateral  
with two pairs of  
parallel and  
congruent sides.

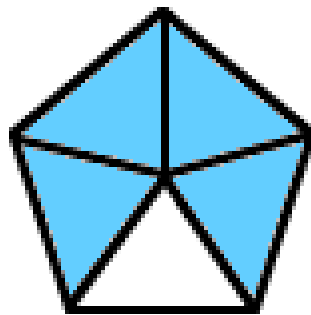
# percent

## percent



80% of  
the  
pentagon  
is shaded.

## percent



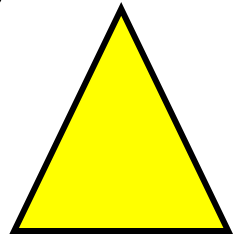
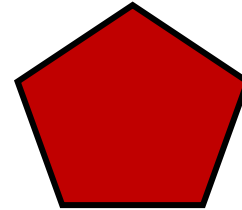
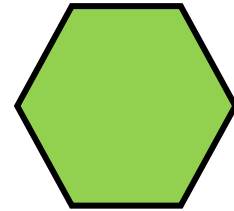
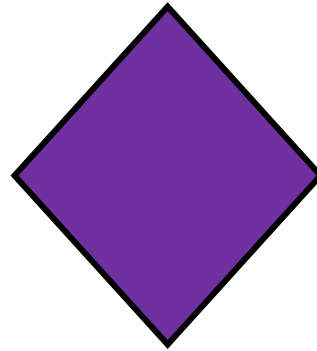
80% of  
the  
pentagon  
is  
shaded.

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

# polygon

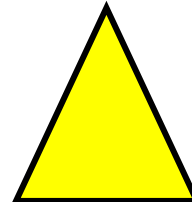
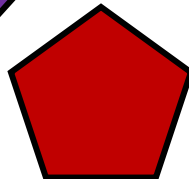
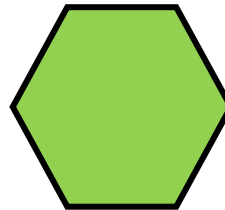
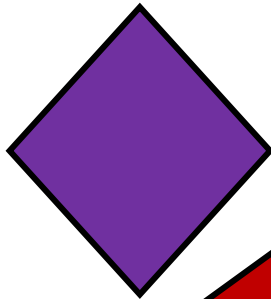
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## polygon



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## polygon



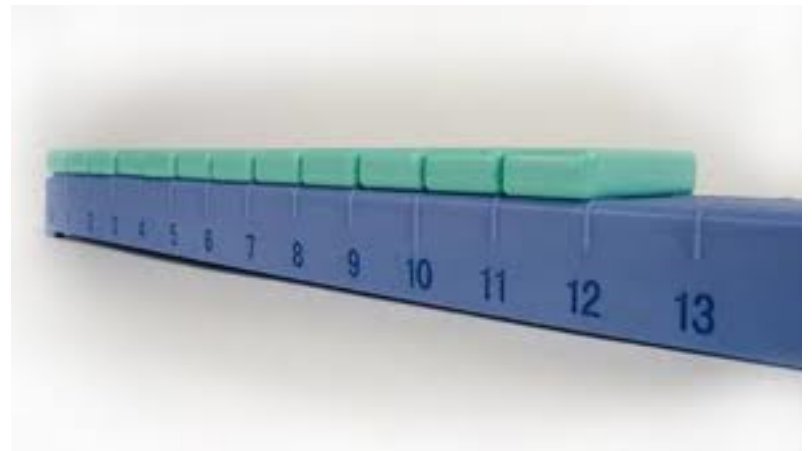
A closed figure formed  
from line segments that  
meet only at their  
endpoints.

# positive numbers

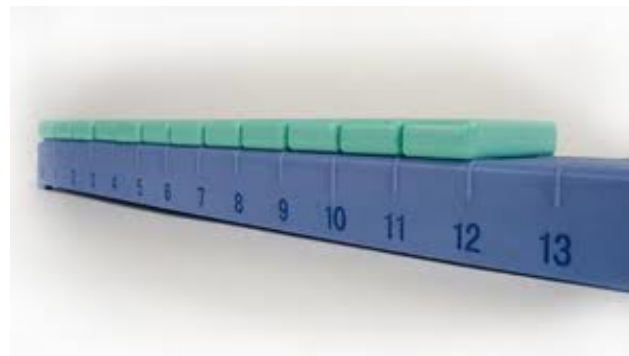
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## positive numbers

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## positive numbers

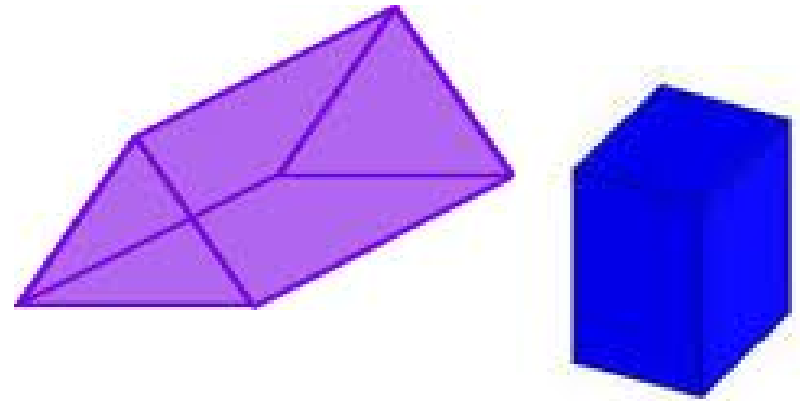


Numbers that are  
greater than zero.

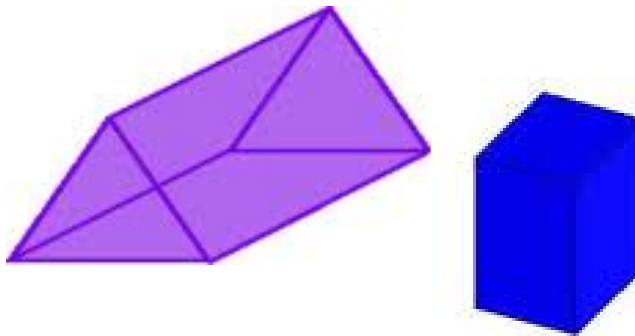
# prism

---

## 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



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

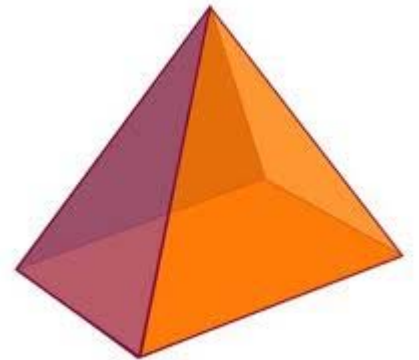
An equation showing  
that two ratios are  
equivalent.

# pyramid

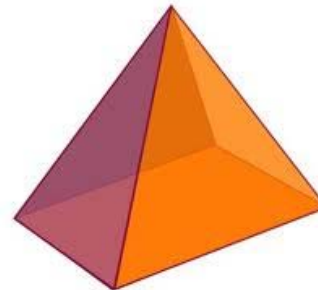
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## pyramid

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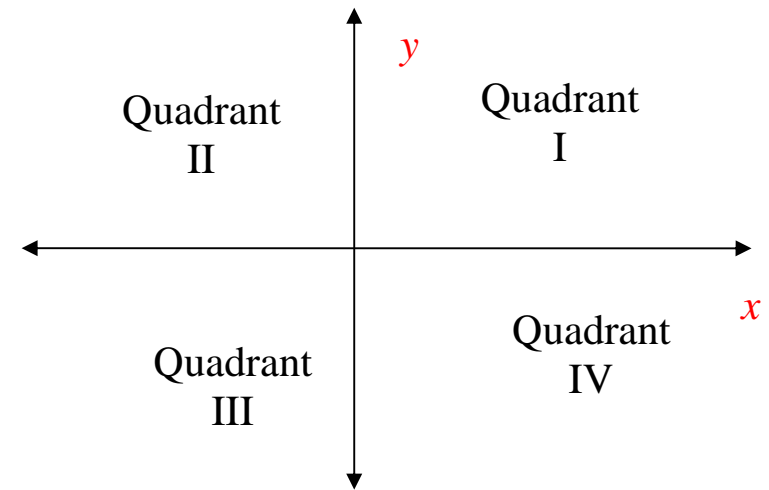
## pyramid



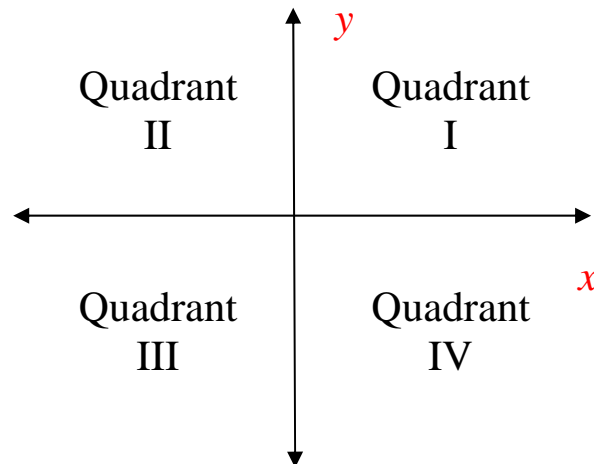
A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.

# quadrants

quadrants



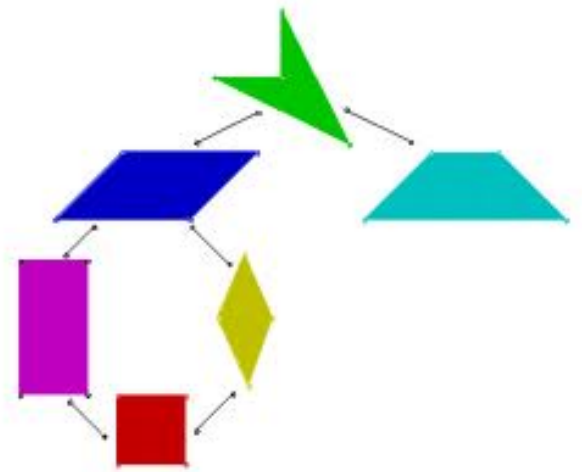
quadrants



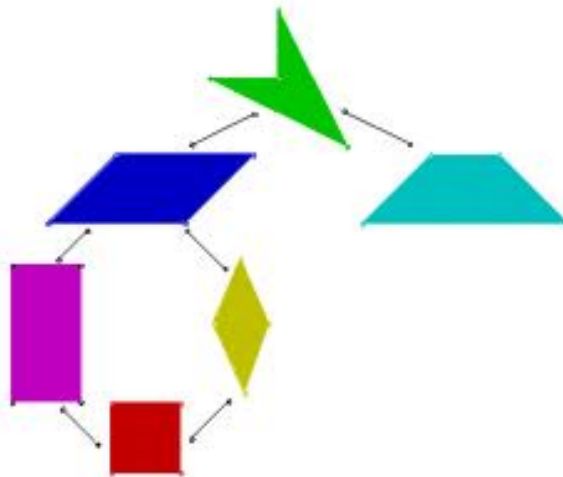
The four sections  
of a coordinate  
grid that are  
separated by the  
axes.

# quadrilateral

quadrilateral



quadrilateral



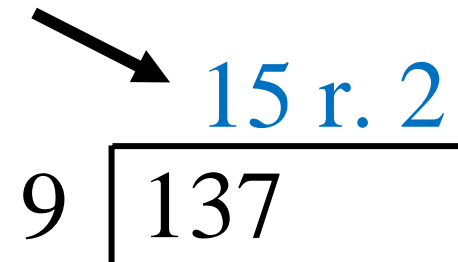
A four-sided polygon.

# quotient

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## quotient

quotient

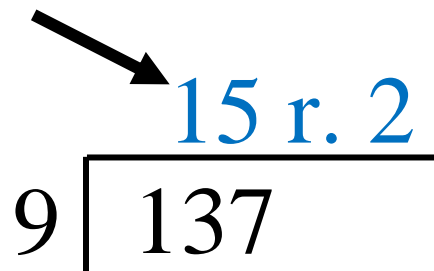


A diagram showing a division problem. The divisor 9 is on the left, followed by a vertical bar and the dividend 137. Above the bar, the quotient is written as 15 r. 2. A black arrow points from the word "quotient" above to the 15 r. 2.

$$9 \overline{) 137} \quad 15 \text{ r. } 2$$

## quotient

quotient



A diagram showing a division problem. The divisor 9 is on the left, followed by a vertical bar and the dividend 137. Above the bar, the quotient is written as 15 r. 2. A black arrow points from the word "quotient" above to the 15 r. 2.

$$9 \overline{) 137} \quad 15 \text{ r. } 2$$

The result of the division of  
one quantity by another.

# rate

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## rate



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

---

## rate

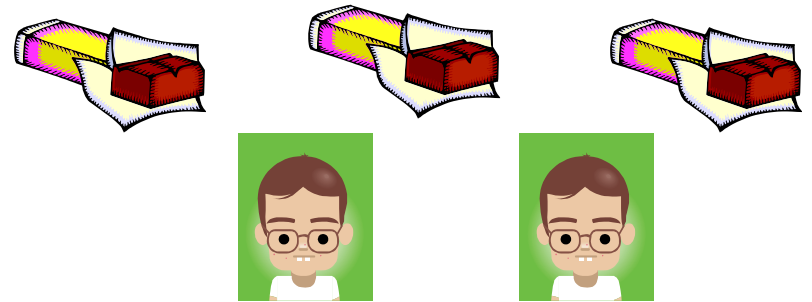


The car was traveling 65 miles per hour on the freeway.

A ratio comparing two different units.

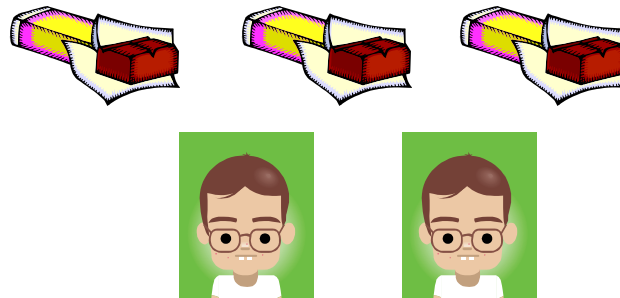
# ratio

# ratio



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

# ratio



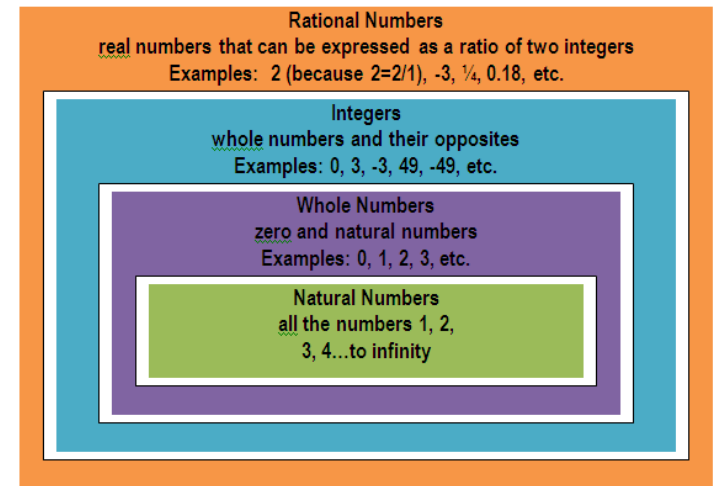
The ratio of chocolate bars to  
boys is  $3:2$ .

A comparison of two  
numbers using  
division.

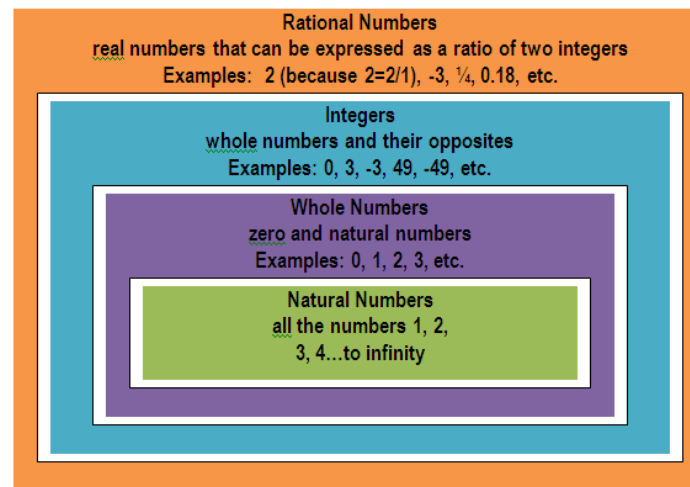


# rational number

rational  
number



rational  
number



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

# rectangle

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## rectangle



## rectangle

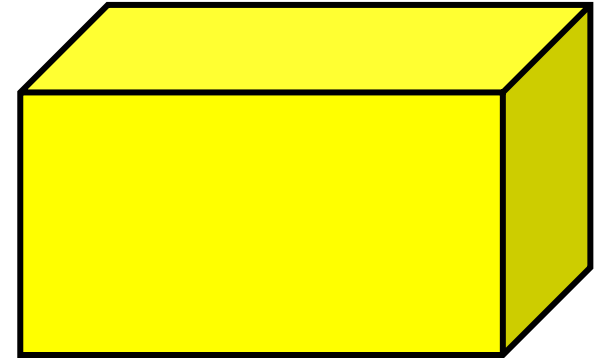


A quadrilateral with  
two pairs of  
congruent, parallel  
sides and four right  
angles.

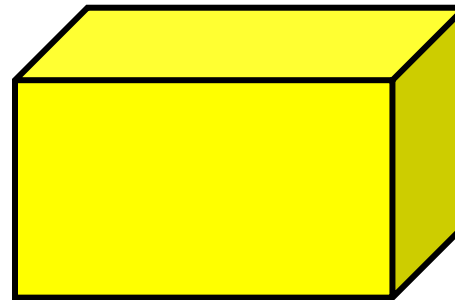
# right rectangular prism

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right rectangular  
prism



right rectangular  
prism

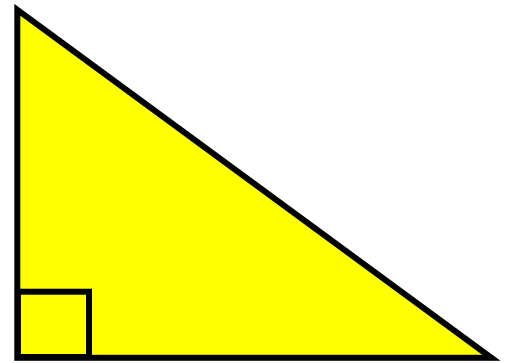


A prism with  
six rectangular  
faces where the  
lateral edge is  
perpendicular  
to the plane of  
the base.

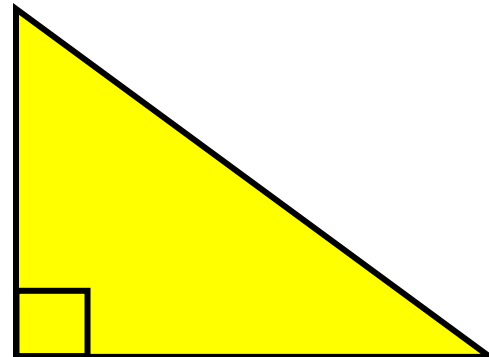
# right triangle

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## right triangle



## right triangle

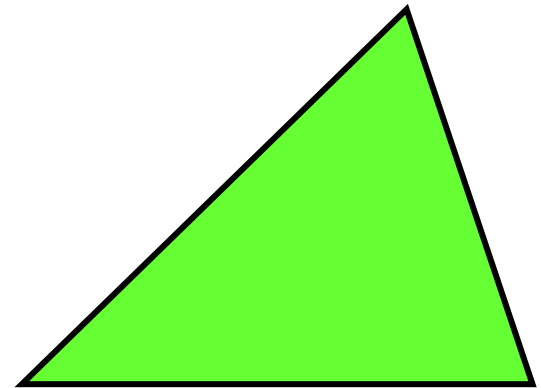


A triangle that  
has one  $90^\circ$   
angle.

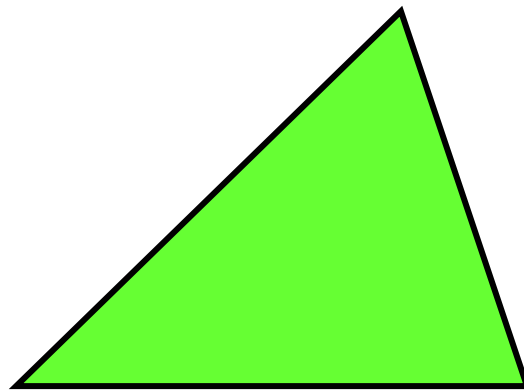
# scalene triangle

---

scalene  
triangle



scalene  
triangle



A triangle that has no  
congruent sides.

# signed number

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## signed number

---

-5 +8  
+45 -23

## signed number

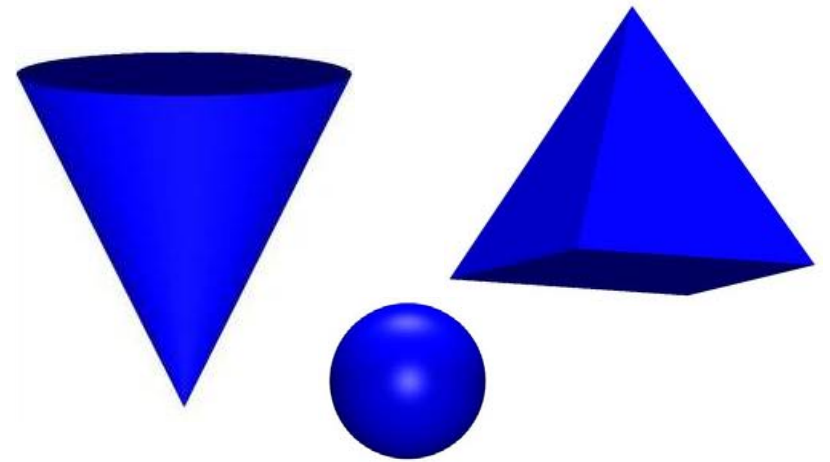
Positive or negative  
number.

# solid figure

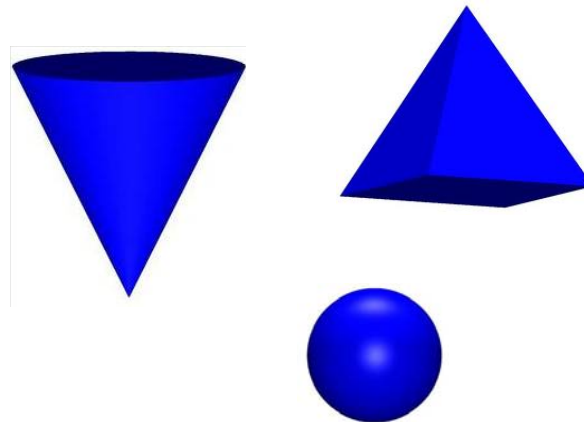
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## solid figure

---



## solid figure

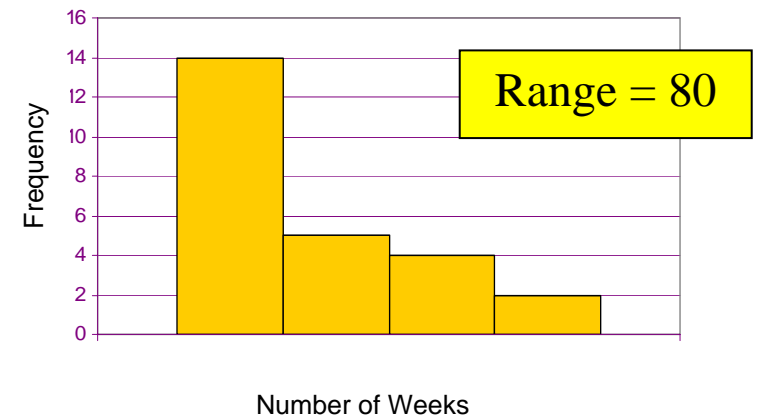


A geometric  
figure with 3  
dimensions.

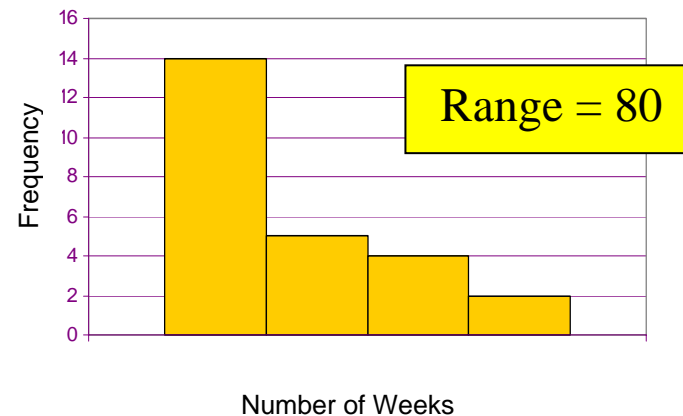
# spread

# 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

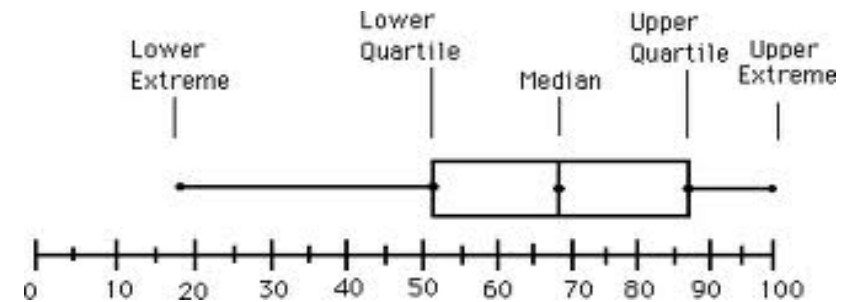


# statistical variability

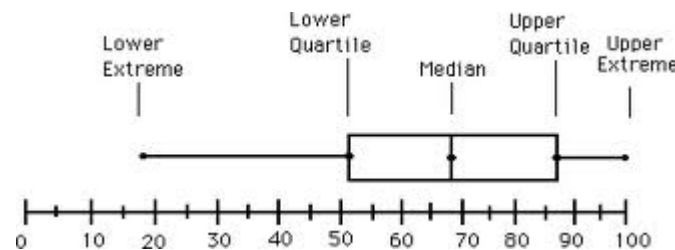
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## statistical variability

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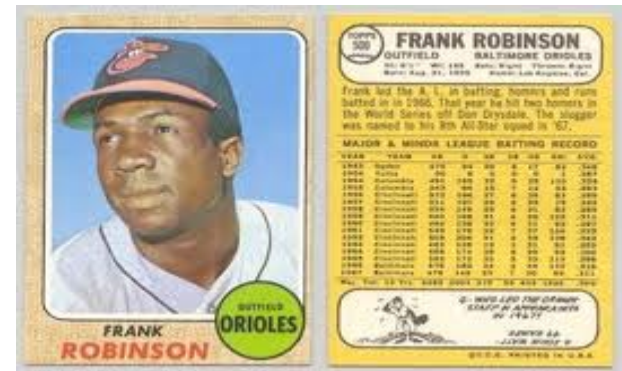
## statistical variability



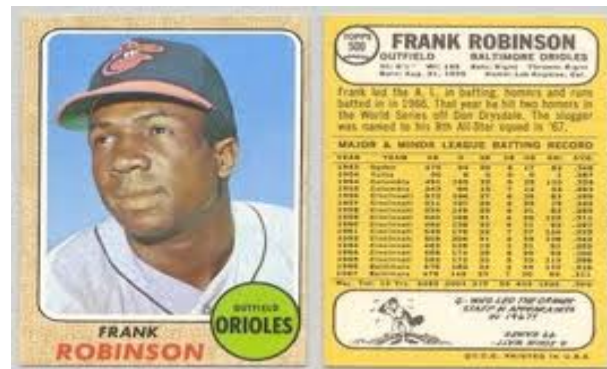
A variability or spread in a variable or a probability distribution. Common examples of measures of statistical dispersion are the variance, standard deviation, and interquartile range.

# statistics

This baseball card shows statistics for a famous baseball player.



This baseball card shows statistics for a famous baseball player.



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

# statistics

# 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

$$45.3 + 92.9 = 138.2$$

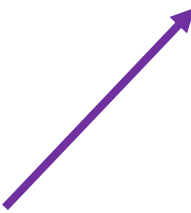
sum



## sum

$$45.3 + 92.9 = 138.2$$

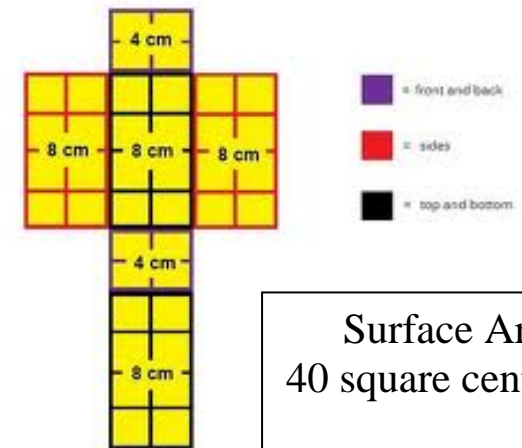
sum



The result of  
addition.

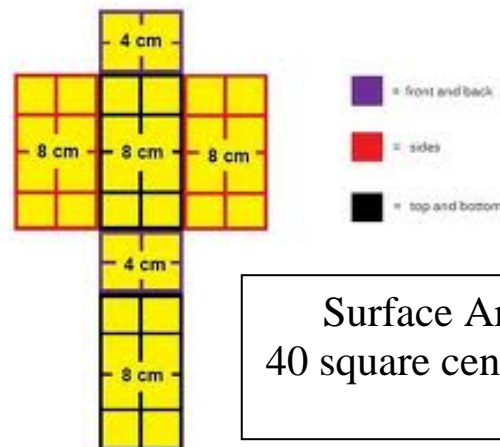
# surface area

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



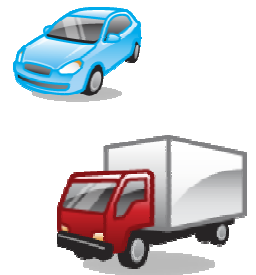
Student	Number of Books Read in the Summer
Sara	3
Jose	8
Timothy	2
Belinda	3
Gretchen	11
Trevor	7

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?



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.

## tape diagram



# 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.

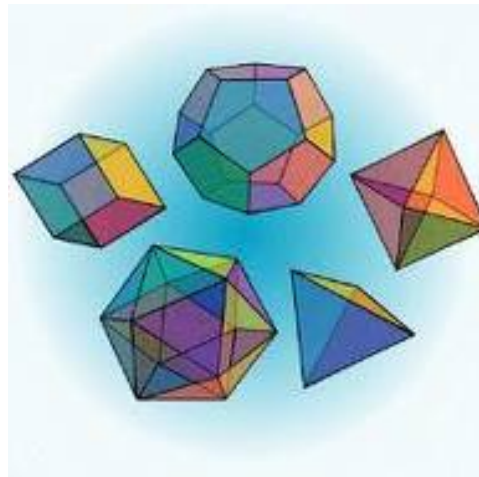
# three-dimensional

---

**three-  
dimensional**



**three-  
dimensional**



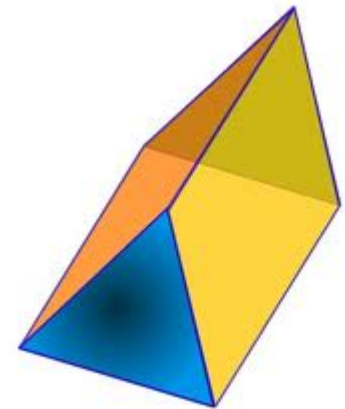
3-D. Existing in 3 dimensions; having length, width, and height.

# triangular prism

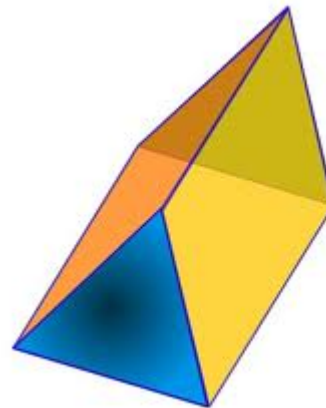
---

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.

# unit rate

---

unit rate

Cereal is  
\$0.43 per  
ounce.



unit rate

Cereal is  
\$0.43 per  
ounce.



A rate with a  
denominator of 1.

# value

---

$$5x - 2 = 23$$

## value

The value of  $x$   
is 5.

$$5x - 2 = 23$$

## value

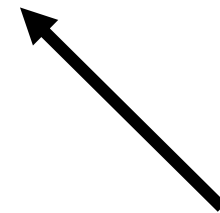
The value of  $x$   
is 5.

The amount  
something is worth.

# variable

## variable

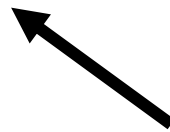
$$2n + 3 = 11$$



variable

## variable

$$2n + 3 = 11$$



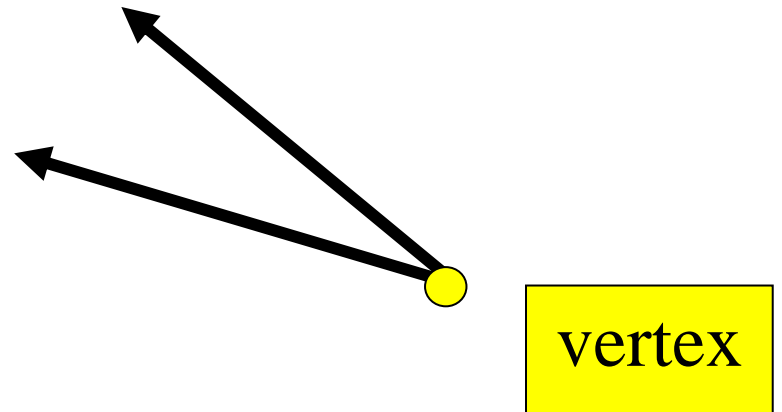
variable

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

# vertex

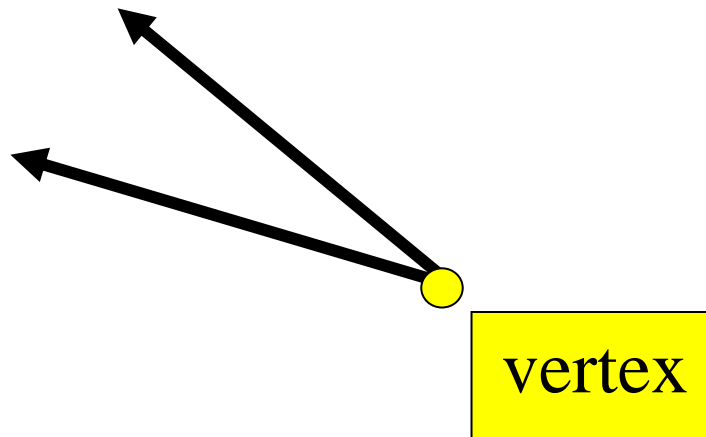
---

## vertex



---

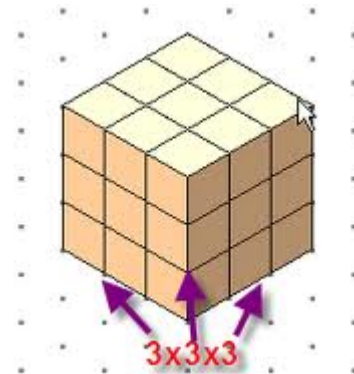
## vertex



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

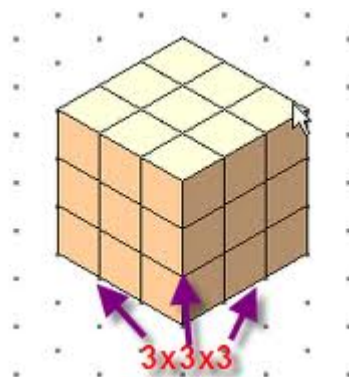
# volume

# volume



Volume =

27 cubic  
units



Volume =

27 cubic  
units

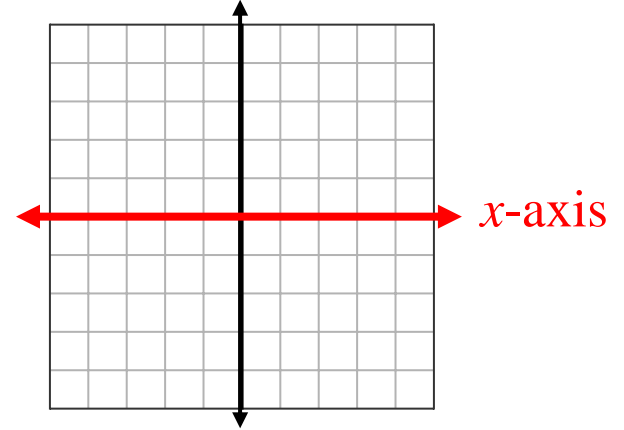
# volume

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

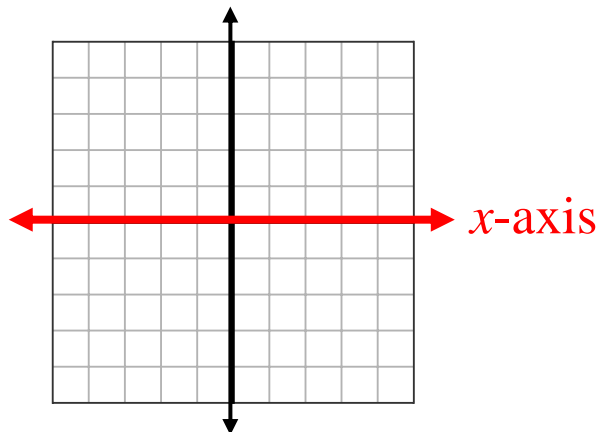


# $x$ -axis

## $x$ -axis



## $x$ -axis



In a Cartesian grid, the horizontal axis.

# $x$ -coordinate

---

$x$ -coordinate

(**7**, 2)

$x$ -coordinate

---

$x$ -coordinate

(**7**, 2)

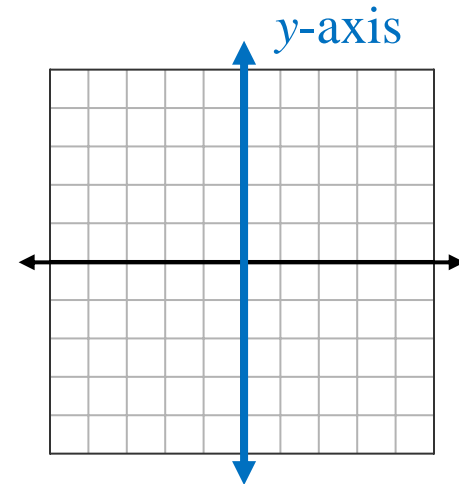
$x$ -coordinate

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

# $y$ -axis

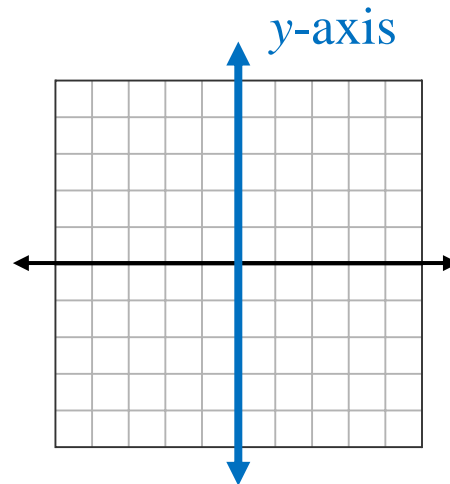
---

## $y$ -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.

