

# Vocabulary Cards and Word Walls

Revised: March 5, 2012

## 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/>

# absolute value

---

absolute  
value

$$|-5| = 5$$

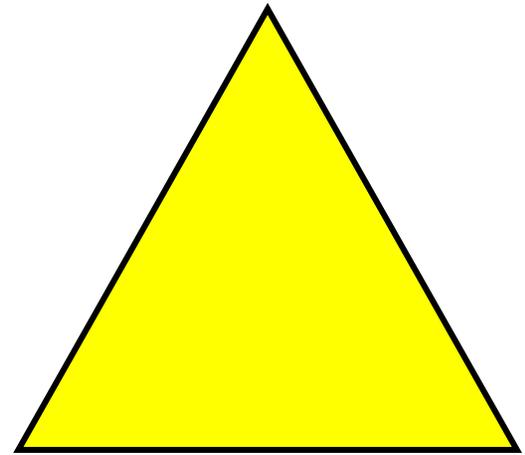
absolute  
value

$$|-5| = 5$$

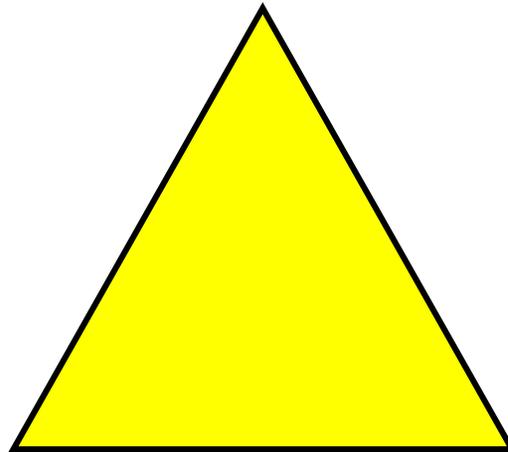
The distance of a number from zero on the number line. Always positive.

# acute triangle

acute  
triangle



acute  
triangle



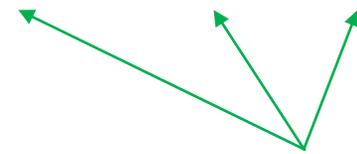
A triangle with no angle  
measuring  $90^\circ$  or more.

# addend

---

# addend

$$33 + 4.7 + 0.9 = 38.6$$

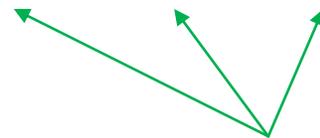


**addends**

---

# addend

$$33 + 4.7 + 0.9 = 38.6$$



**addends**

Any number being added.

# Additive Identity Property of 0

---

Additive Identity  
Property of 0

$$a + 0 = a$$

Additive Identity  
Property of 0

$$a + 0 = a$$

Adding zero to a number  
gives a sum identical to  
the given number.

# additive inverses

---

additive inverses  $5 + (-5) = 0$

---

additive inverses  $5 + (-5) = 0$

Two numbers whose sum is 0 are additive inverses of one another.

# algebraic expression

algebraic  
expression

$$3x + 2$$

algebraic  
expression

$$3x + 2$$

A group of numbers, symbols, and variables that express an operation or a series of operations.

# algorithm

algorithm

## Partial Product Example

555	
<u>x 7</u>	
35	Step 1: Multiply the ones.
350	Step 2: Multiply the tens.
<u>3500</u>	Step 3: Multiply the hundreds.
3885	Step 4: Add the partial products.

## Partial Product Example

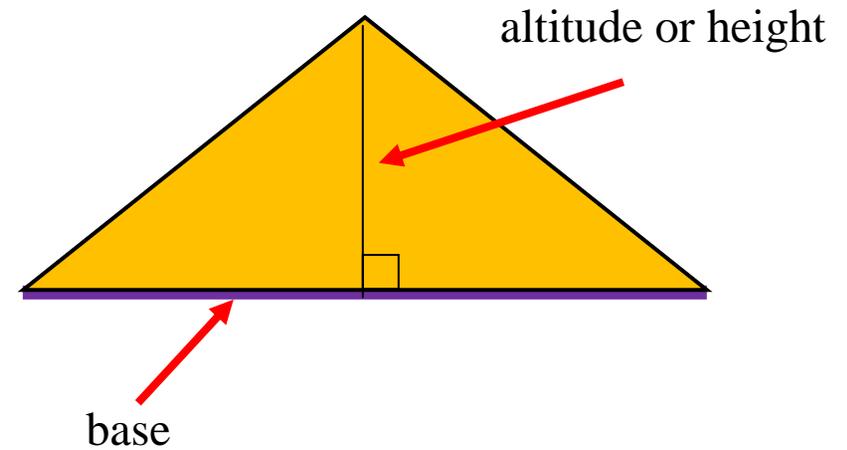
algorithm

555	
<u>x 7</u>	
35	Step 1: Multiply the ones.
350	Step 2: Multiply the tens.
<u>3500</u>	Step 3: Multiply the hundreds.
3885	Step 4: Add the partial products.

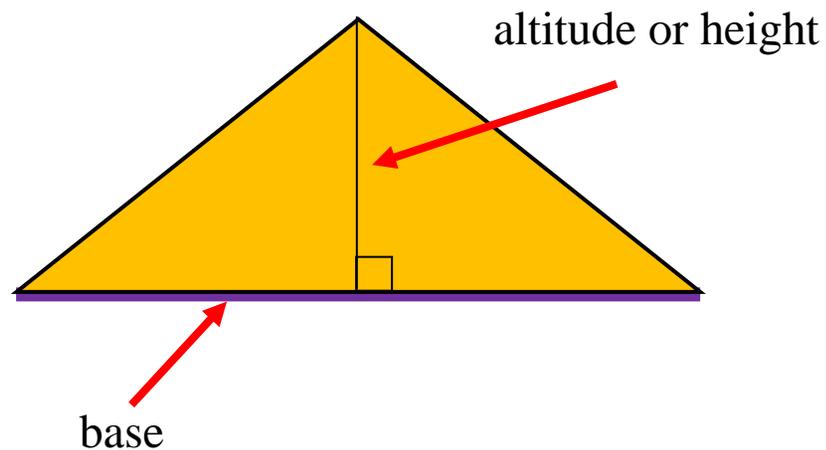
A step-by-step method  
for computing.

# altitude

altitude



altitude



The perpendicular distance from a vertex to the opposite side of a plane figure.

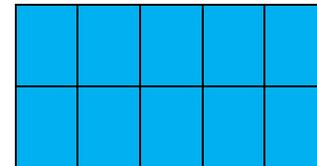
# area

---

# area

**2 rows of 5 = 10 square units**  
or

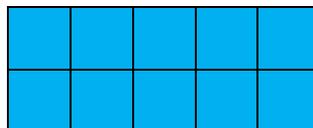
**$2 \times 5 = 10$  square units**



**2 rows of 5 = 10 square units**  
or

**$2 \times 5 = 10$  square units**

# area



The measure, in square units,  
of the interior region of a  
2-dimensional figure or the  
surface of a  
3-dimensional figure.

# Associative Property of Addition

## Associative Property of Addition

$$\begin{aligned}(5 + 7) + 3 &= 5 + (7 + 3) \\ 12 + 3 &= 5 + 10 \\ 15 &= 15\end{aligned}$$

## Associative Property of Addition

$$\begin{aligned}(5 + 7) + 3 &= 5 + (7 + 3) \\ 12 + 3 &= 5 + 10 \\ 15 &= 15\end{aligned}$$

The sum stays the same when the grouping of addends is changed.  
 $(a + b) + c = a + (b + c)$ ,  
where  $a$ ,  $b$ , and  $c$  stand for any real numbers.

# Associative Property of Multiplication

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## Associative Property of Multiplication

$$\begin{aligned}(5 \times 7) \times 3 &= 5 \times (7 \times 3) \\ 35 \times 3 &= 5 \times 21 \\ 105 &= 105\end{aligned}$$

## Associative Property of Multiplication

$$\begin{aligned}(5 \times 7) \times 3 &= 5 \times (7 \times 3) \\ 35 \times 3 &= 5 \times 21 \\ 105 &= 105\end{aligned}$$

The product stays the same when the grouping of factors is changed.  $(a \times b) \times c = a \times (b \times c)$ , where  $a$ ,  $b$ , and  $c$  stand for any real numbers.

# attribute

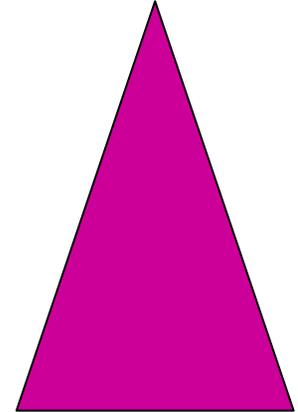
---

attribute

large

triangle

pink



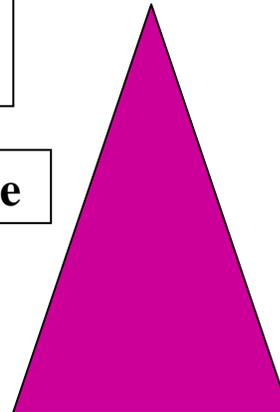
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attribute

large

triangle

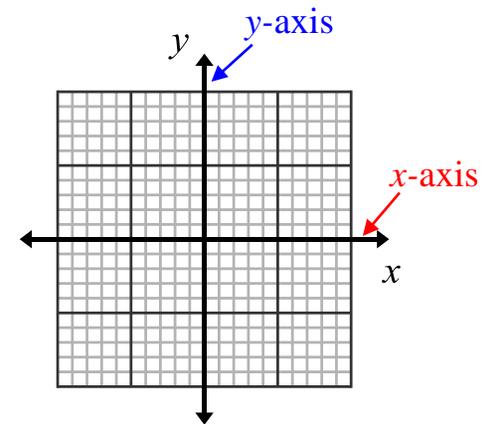
pink



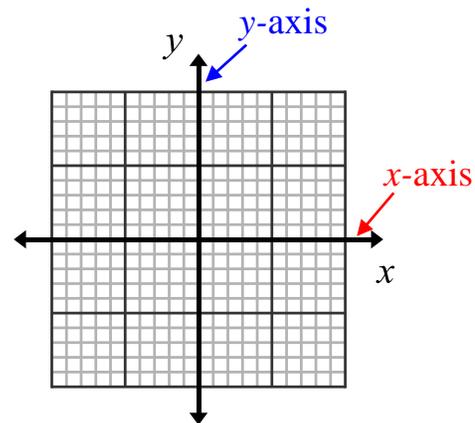
A characteristic.  
e.g. size, shape or  
color

# axis

# axis



# axis

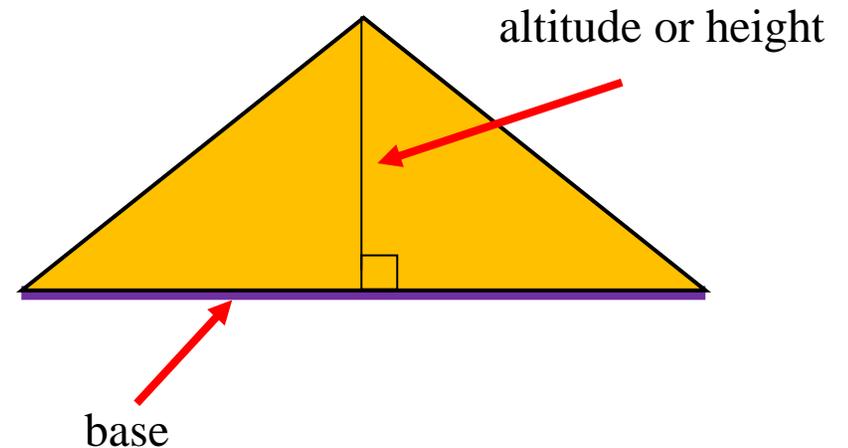


A reference line from which distances or angles are measured in a coordinate grid.  
(plural – axes)

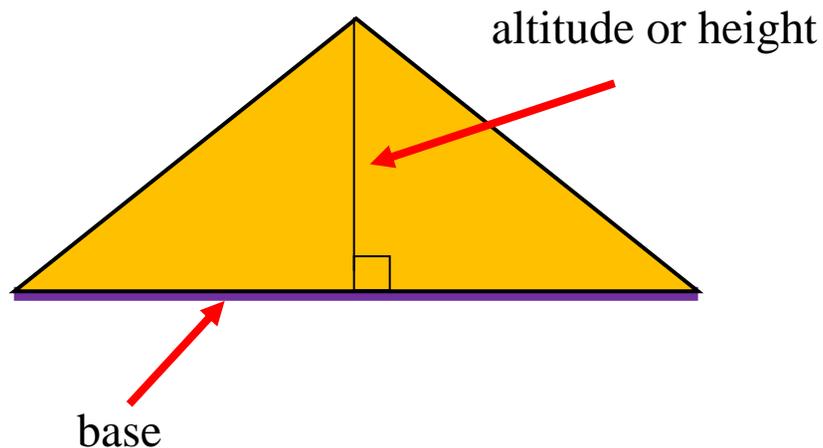
# base of a polygon

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## base of a polygon



## base of a polygon

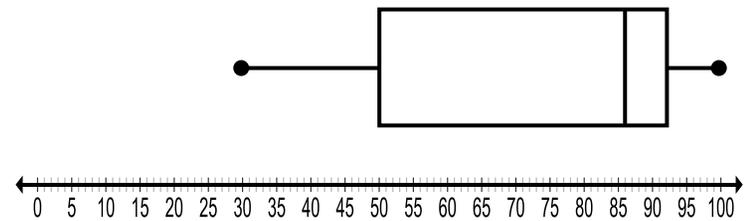


The side of a polygon that is perpendicular to the altitude or height.

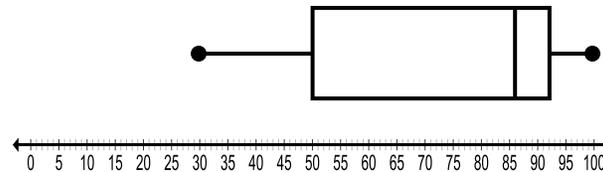
# box plot

---

## box plot



## box plot



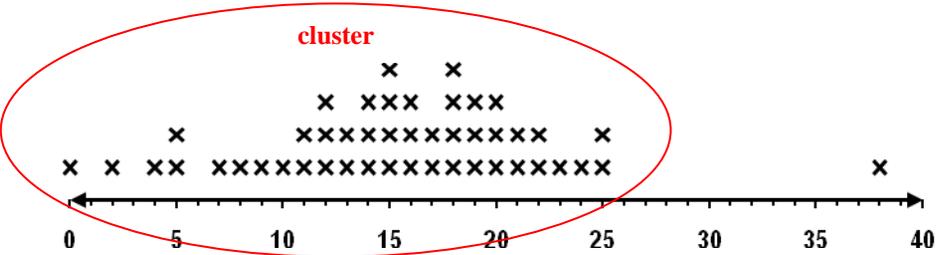
A diagram that shows the five number summary of a distribution. (Five number summary includes lowest value, lower quartile, median, upper quartile, and highest value.)

# cluster

# cluster



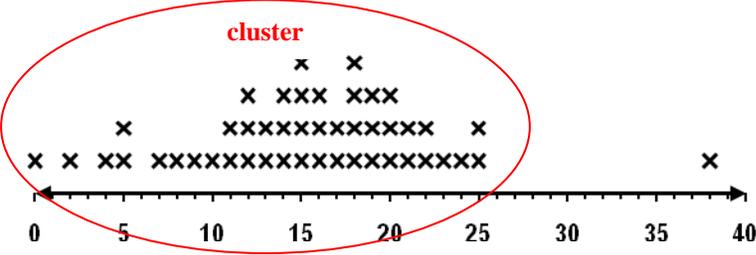
Hours Watching TV In One Week



# cluster



Hours Watching TV In One Week



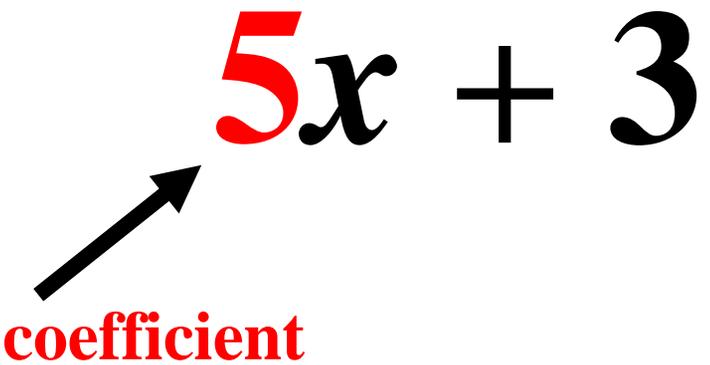
A group of the same or similar elements gathered or occurring closely together on a graph.

# coefficient

---

coefficient  $5x + 3$

coefficient



coefficient  $5x + 3$

coefficient



A numerical factor in a term  
of an algebraic expression.

# common denominator

---

**common  
denominator**

**12** is a common  
denominator for

$$\frac{2}{3} \text{ and } \frac{3}{4}$$

**common  
denominator**

**12** is a common  
denominator for

$$\frac{2}{3} \text{ and } \frac{3}{4}$$

For two or more fractions, a common denominator is a common multiple of the denominators.

# common factor

---

**common  
factor**

12 (1, 2, 3, 4, 6, 12)

18 (1, 2, 3, 6, 9, 18)

**Common Factors of 12 and 18:**

**1, 2, 3, 6**

---

**common  
factor**

12 (1, 2, 3, 4, 6, 12)

18 (1, 2, 3, 6, 9, 18)

**Common Factors of 12 and 18:**

**1, 2, 3, 6**

Any common factor of  
two or more numbers.

# common multiple

---

**common  
multiple**

**4**, 8, **12**, 16, 20, **24**, 28, 32, **36**...  
**6**, **12**, 18, **24**, 30, **36**, 42...

**Common Multiples of 4 and 6:**  
**12, 24, 36...**

**common  
multiple**

**4**, 8, **12**, 16, 20, **24**, 28, 32, **36**...  
**6**, **12**, 18, **24**, 30, **36**, 42...

**Common Multiples of 4 and 6:**  
**12, 24, 36...**

Any common multiple of  
two or more numbers.

# Commutative Property of Addition

---

Commutative Property  
of Addition

$$5 + 3 = 3 + 5$$

Commutative  
Property of  
Addition

$$5 + 3 = 3 + 5$$

The sum stays the same when the order of the addends is changed.  $a + b = b + a$ , where  $a$  and  $b$  are any real numbers.

# Commutative Property of Multiplication

---

**Commutative  
Property of  
Multiplication**

$$4 \times 7 = 7 \times 4$$

**Commutative  
Property of  
Multiplication**

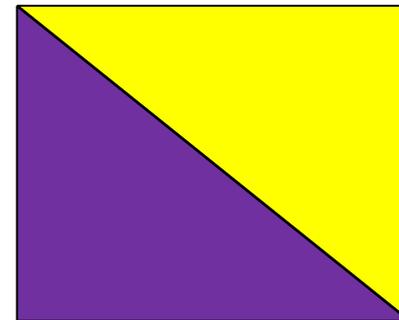
$$4 \times 7 = 7 \times 4$$

The product stays the same when the order of the factors is changed.  
 $a \times b = b \times a$ , where  $a$  and  $b$  are any real numbers.

# compose

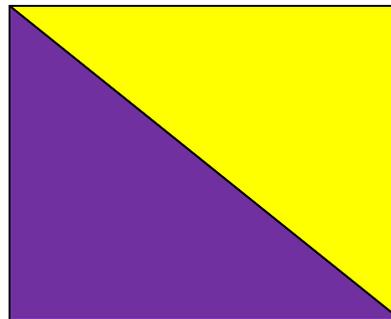
2 triangles can form a rectangle.

# compose



2 triangles can form a  
rectangle.

# compose



To put together, as in  
numbers or shapes.

# constant

constant

$$5x + 4$$



constant

constant

$$5x + 4$$



constant

A number with a value that is always the same.

# constant speed

---

constant  
speed



constant  
speed



Movement at a fixed  
(constant) distance per  
unit of time.

# coordinate pair

---

coordinate  
pair

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

coordinate  
pair

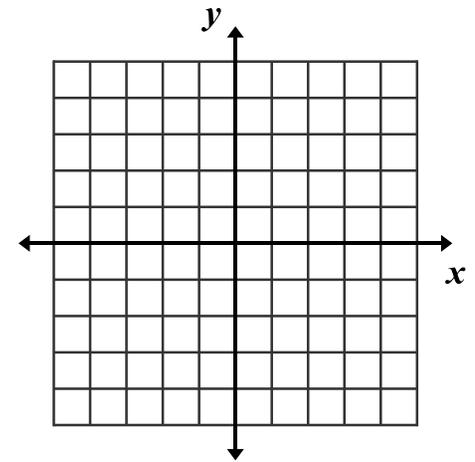
**$(-5, 2)$**   
 $(x, y)$

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

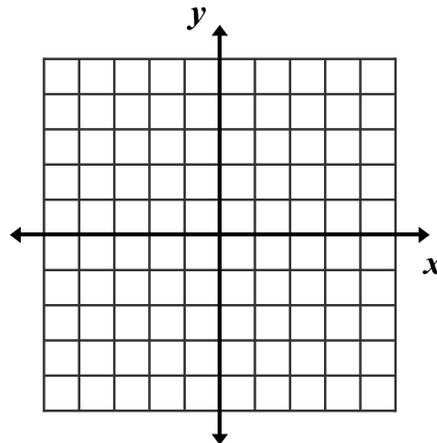
# coordinate plane

---

coordinate  
plane



coordinate  
plane

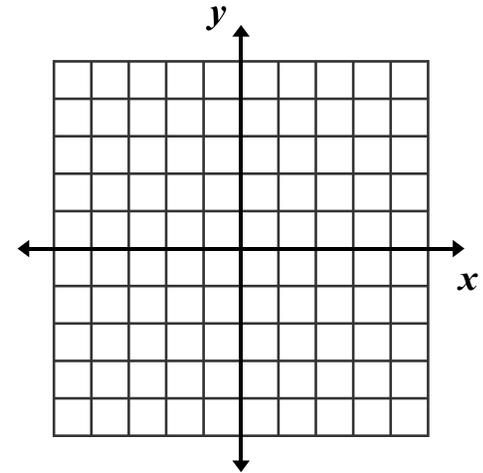


A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes. (Also called *coordinate grid* or *coordinate system*.)

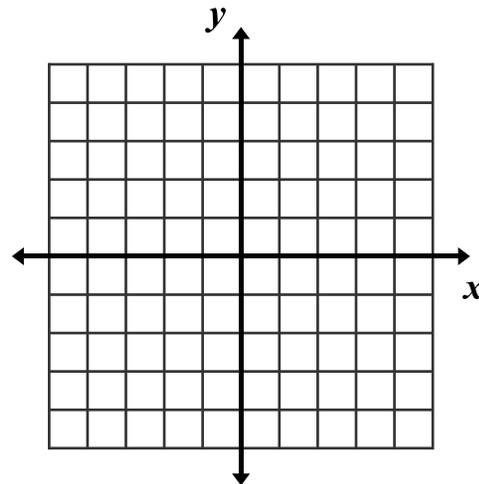
# coordinate system

---

## coordinate system



## coordinate system



Also known as a coordinate grid. A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes.

# coordinates

---

coordinates

$(3, -5)$   
(  $x$  ,  $y$  )

coordinates

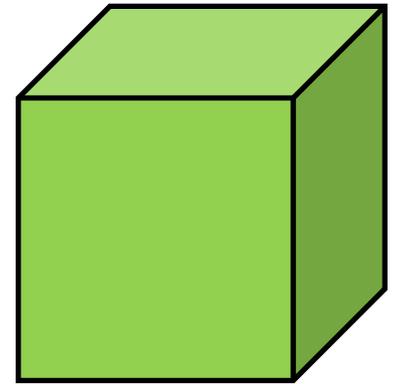
$(3, -5)$   
(  $x$  ,  $y$  )

An ordered pair of numbers that identify a point on a coordinate plane.

# cube

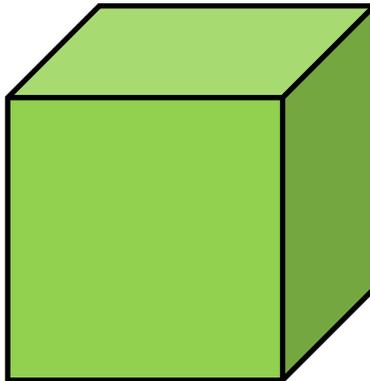
---

## cube



---

## cube

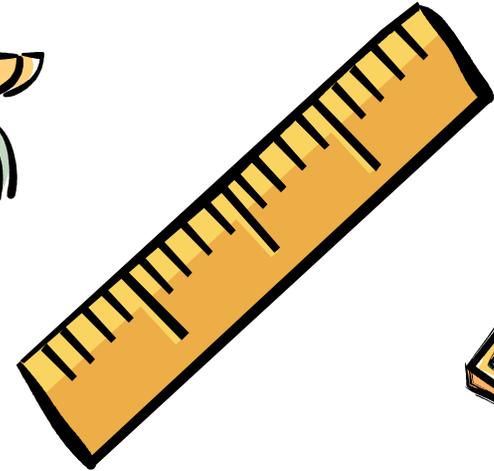


A rectangular solid  
having six congruent  
square faces.

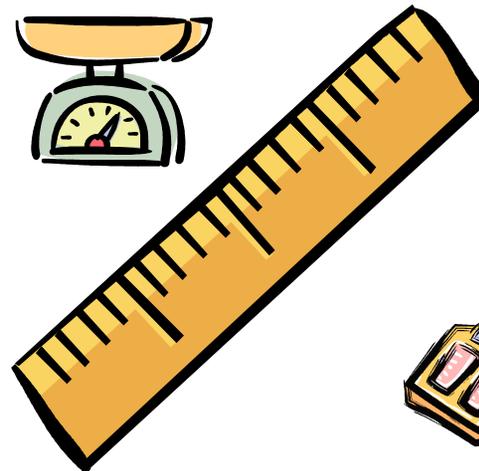
# customary system

---

customary  
system



customary  
system



A system of measurement used in the U.S. The system includes units for measuring length, capacity, and weight.

# data

data



Number of School Carnival Tickets Sold	
Kindergarten	22
1 <sup>st</sup> Grade	15
2 <sup>nd</sup> Grade	34
3 <sup>rd</sup> Grade	9
4 <sup>th</sup> Grade	16
5 <sup>th</sup> Grade	29
6 <sup>th</sup> Grade	11

data



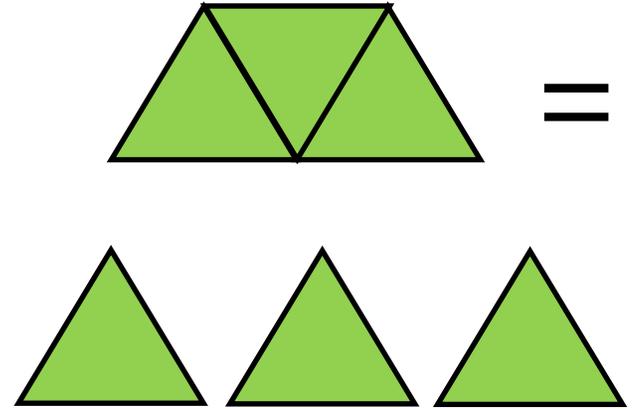
Number of School Carnival Tickets Sold	
Kindergarten	22
1 <sup>st</sup> Grade	15
2 <sup>nd</sup> Grade	34
3 <sup>rd</sup> Grade	9
4 <sup>th</sup> Grade	16
5 <sup>th</sup> Grade	29
6 <sup>th</sup> Grade	11

Information, especially numerical information. Usually organized for analysis.

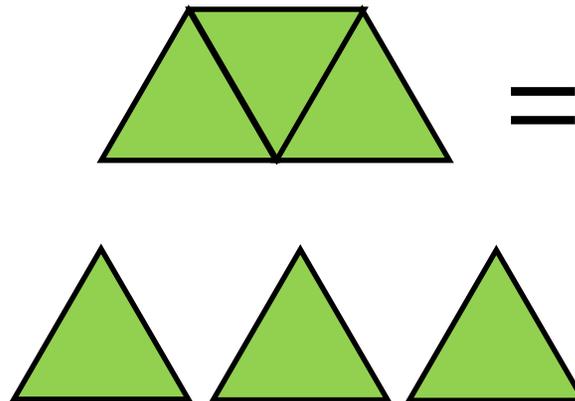
# decompose

---

decompose



decompose

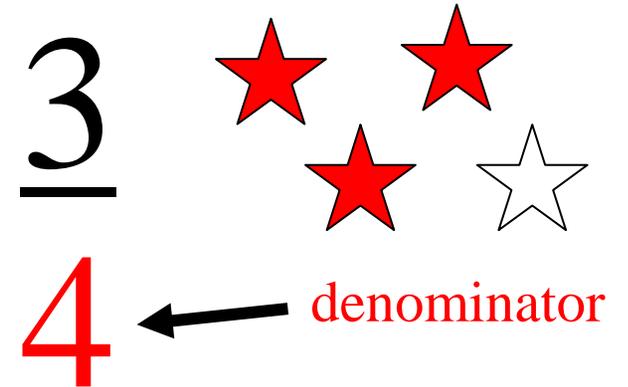


To separate into  
components or basic  
elements.

# denominator

---

denominator



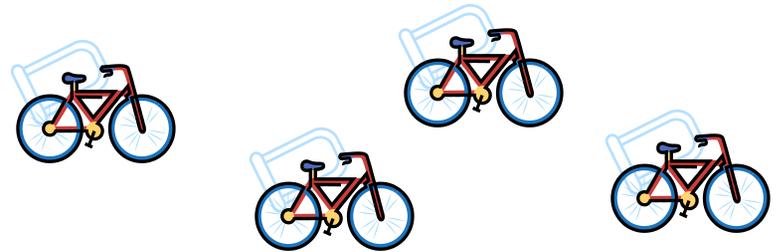
denominator



The quantity below the line in a fraction. It tells the number of equal parts into which a whole is divided.

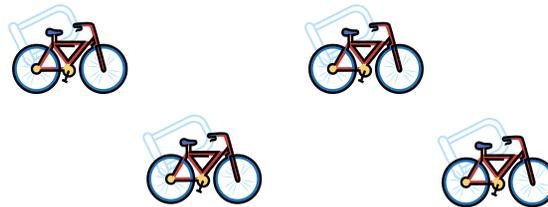
# dependent variable

dependent  
variable



# Bikes	1	2	3	4
Wheels	2	4	6	8

dependent  
variable



# Bikes	1	2	3	4
Wheels	2	4	6	8

In a function, a variable whose value is determined by the value of the related independent variable.

# difference

---

## difference

$$49.75 - 13.9 = 35.85$$

**difference**



## difference

$$49.75 - 13.9 = 35.85$$

**difference**



The amount that remains after one quantity is subtracted from another.

# distribution

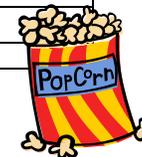
# distribution

Age of People Attending a Movie		
Age Ranges	Tally	Frequency
0 - 9	III	3
10 - 19	IIII	4
20 - 29	IIII I	6
30 - 39	IIII III	8
40 - 49		0
50 - 59	—	1
60-69	—H	2



# distribution

Age of People Attending a Movie		
Age Ranges	Tally	Frequency
0 - 9	III	3
10 - 19	IIII	4
20 - 29	IIII I	6
30 - 39	IIII III	8
40 - 49		0
50 - 59	—	1
60-69	—H	2



A table that shows how many there are of each type of data.

# Distributive Property

---

## Distributive Property

**Example:**

$$5(6 + 8) = (5 \times 6) + (5 \times 8)$$

## Distributive Property

**Example:**

$$5(6 + 8) = (5 \times 6) + (5 \times 8)$$

$$a \times (b + c) = (a \times b) + (a \times c)$$

and

$$a \times (b - c) = (a \times b) - (a \times c),$$

where  $a$ ,  $b$ , and  $c$  stand for any real numbers.

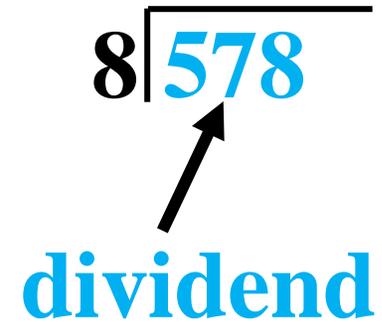
# dividend

---

## dividend

$$8 \overline{) 578}$$

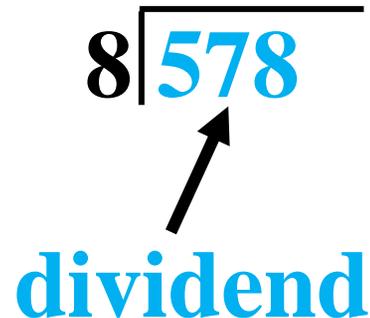
**dividend**



## dividend

$$8 \overline{) 578}$$

**dividend**



A quantity to be divided.

# divisor

---

divisor

$$8 \overline{)578}$$

divisor

divisor

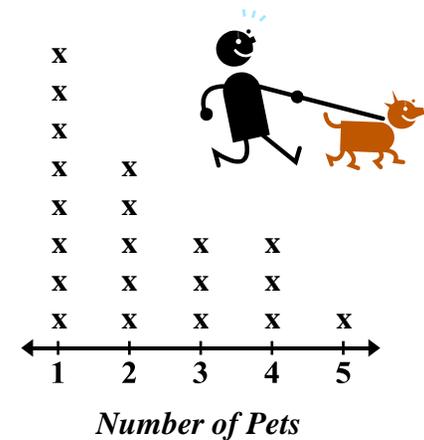
$$8 \overline{)578}$$

divisor

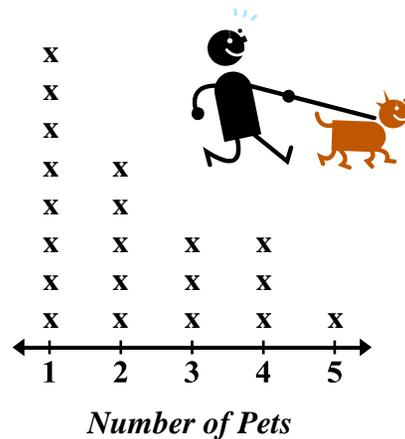
The quantity by which  
another quantity is to be  
divided.

# dot plot

# dot plot



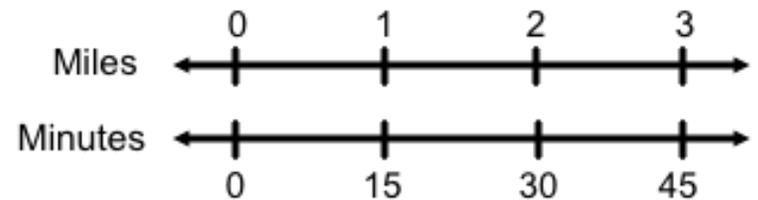
# dot plot



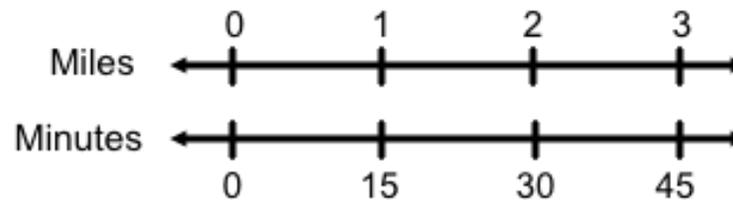
Also known as a line plot. A diagram showing frequency of data on a number line.

# double number line diagram

## double number line diagram



## double number line diagram



A graphic diagram that shows a proportional relationship between two quantities.

# equation

---

## equation

$$9 \times 3 = 20 + 7$$

## equation

$$9 \times 3 = 20 + 7$$

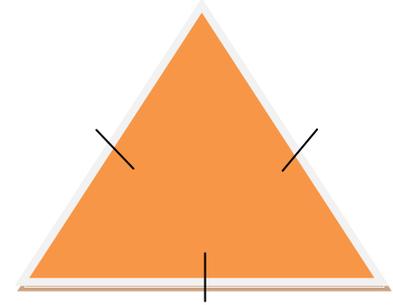
A statement that two  
mathematical  
expressions are equal.

# equilateral triangle

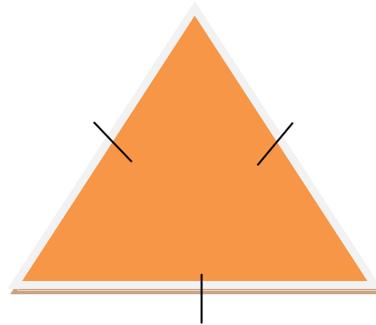
---

## equilateral triangle

---



## equilateral triangle



A triangle whose sides  
are all the same length.

# equivalent

---

$$9 + 12 = 1 + 20$$

# equivalent

---



$$9 + 12 = 1 + 20$$

# equivalent



Naming the same  
number.

# equivalent ratio

---

equivalent  
ratio

$$\frac{6}{12} = \frac{2}{4}$$

Both ratios simplify to  $\frac{1}{2}$ .

---

equivalent  
ratio

$$\frac{6}{12} = \frac{2}{4}$$

Both ratios simplify to  $\frac{1}{2}$ .

If two ratios have the same value when simplified, then they are called equivalent ratios.

# evaluate

---

$$42 - 13 = n$$

# evaluate

$$n = 29$$

---

$$42 - 13 = n$$

# evaluate

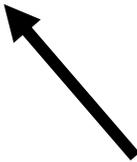
$$n = 29$$

To find the value of  
a mathematical  
expression.

# exponent

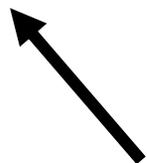
---

## exponent

$$5^2$$


**exponent**

## exponent

$$5^2$$


**exponent**

The number that tells  
how many equal  
factors there are.

# expression

---

expression

$$5x + 3$$

expression

$$5x + 3$$

A variable or combination of variables, numbers, and symbols that represents a mathematical relationship.

# factor

---

**factor**

$$2 \times 6 = 12$$


**factors**

**factor**

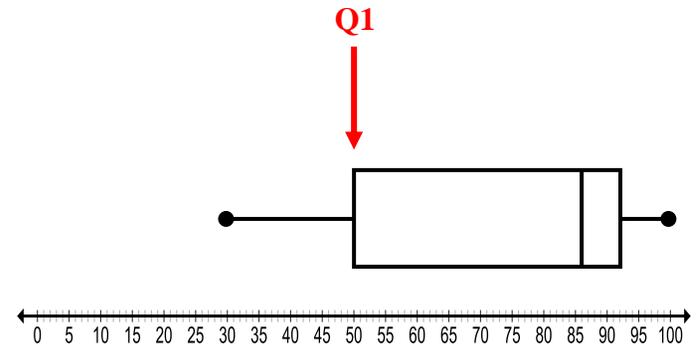
$$2 \times 6 = 12$$


**factors**

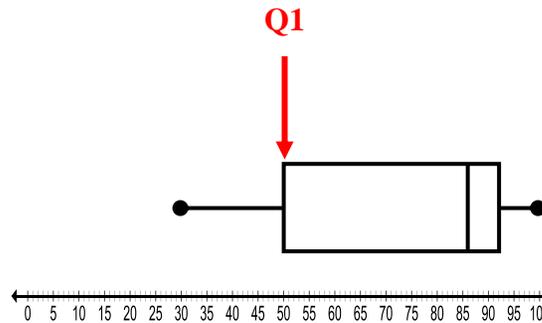
An integer that  
divides evenly into  
another.

# first quartile

## first quartile



## first quartile

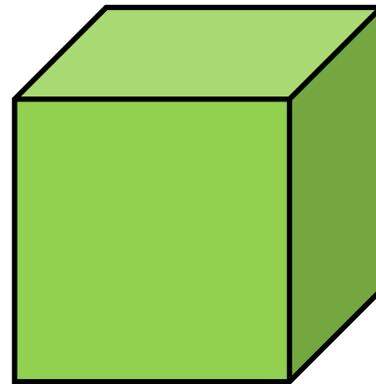


The first quartile is the middle (the median) of the lower half of the data on a box plot. One-fourth of the data lies below the first quartile and three-fourths lies above. Also known as Q1.

# formula

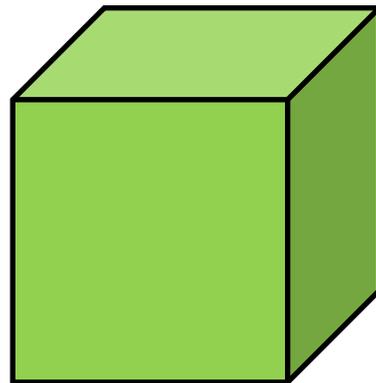
---

**formula**



**Volume  
of a  
cube is**  
 $V = s^3$

**formula**



**Volume  
of a  
cube is**  
 $V = s^3$

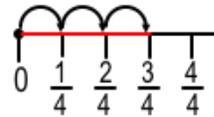
A general  
mathematical  
statement or  
rule.

# fraction

fraction

What is  $\frac{3}{4}$ ?

Measurement Model

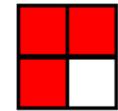


Bar Diagram  
(thickened number line)

Set Model

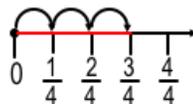


Regional/Array Model



What is  $\frac{3}{4}$ ?

Measurement Model



Bar Diagram  
(thickened number line)

Set Model



Regional/Array Model

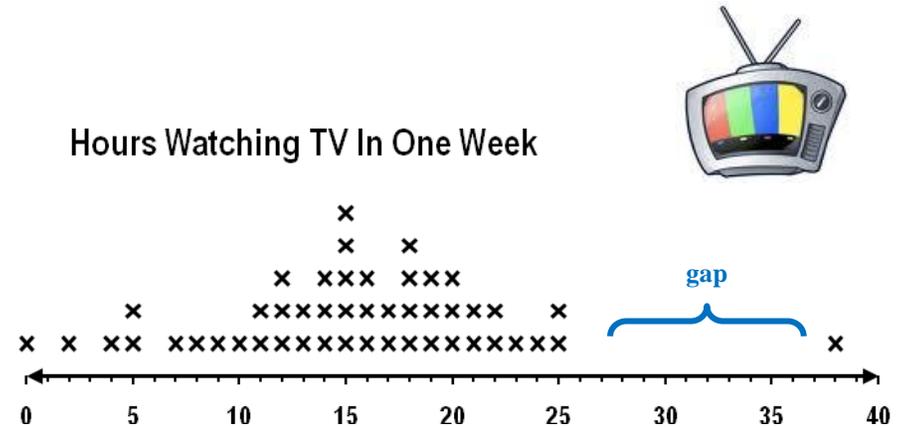


A way of representing part of a whole or part of a group by telling the number of equal parts in the whole and the number of parts you are describing.

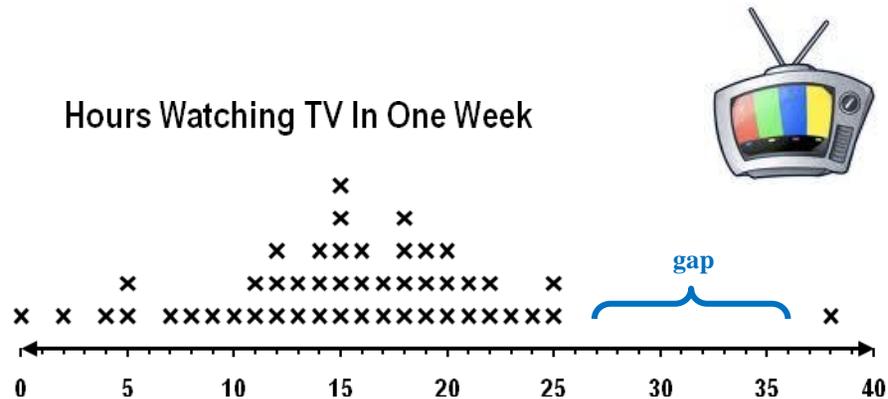
fraction

# gap

# gap



# gap

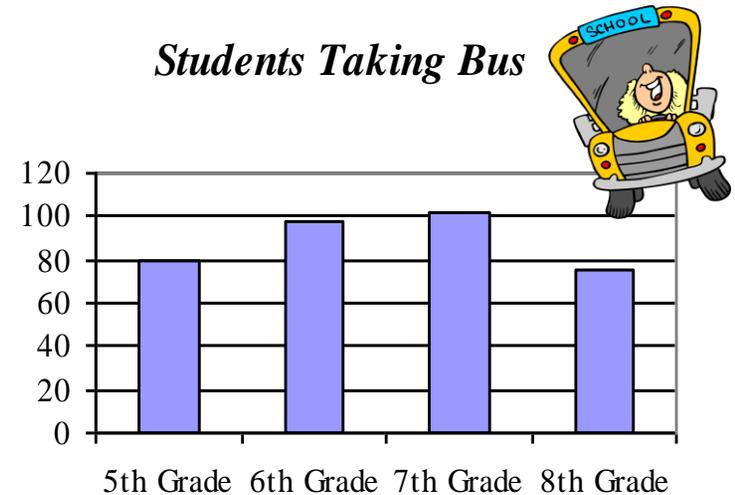


A place on a graph where no data values are present.

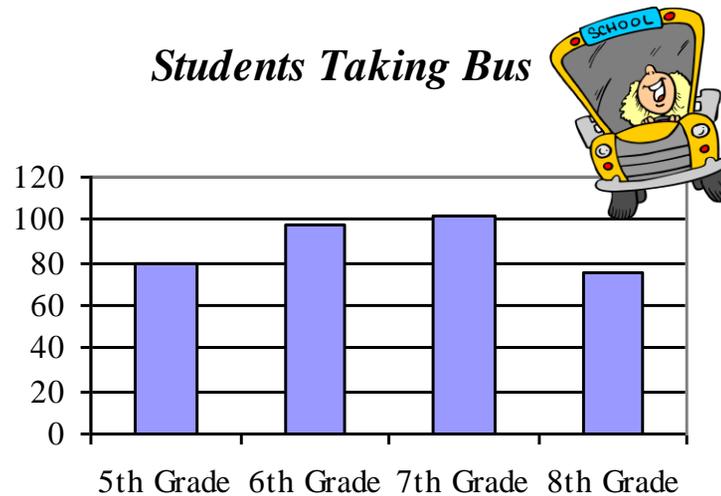
# graph

# graph

*Students Taking Bus*



*Students Taking Bus*

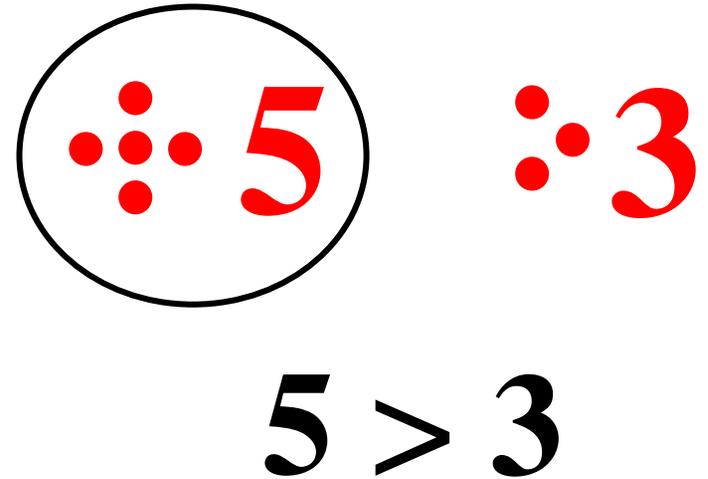


A pictorial device used to show a numerical relationship.

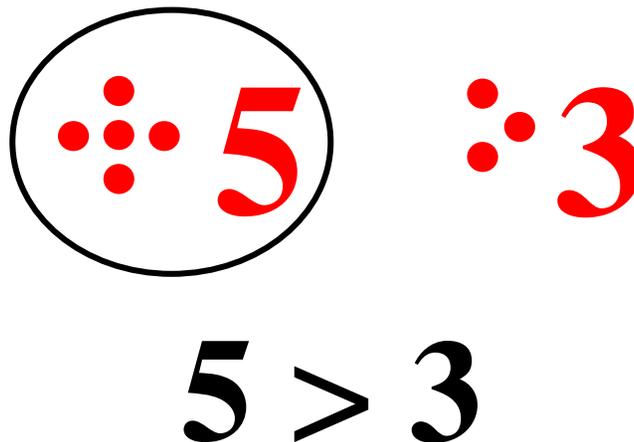
# graph

# greater than

greater  
than



greater  
than



Greater than is used to compare two numbers when the first number is larger than the second number.

# greatest common factor

---

greatest common factor

12 (1, 2, 3, 4, **6**, 12)  
18 (1, 2, 3, **6**, 9, 18)

GCF = **6**

greatest common factor

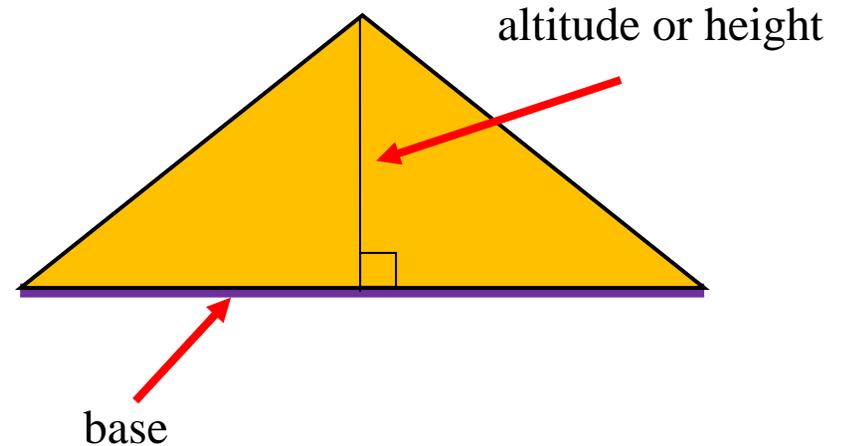
12 (1, 2, 3, 4, **6**, 12)  
18 (1, 2, 3, **6**, 9, 18)

GCF = **6**

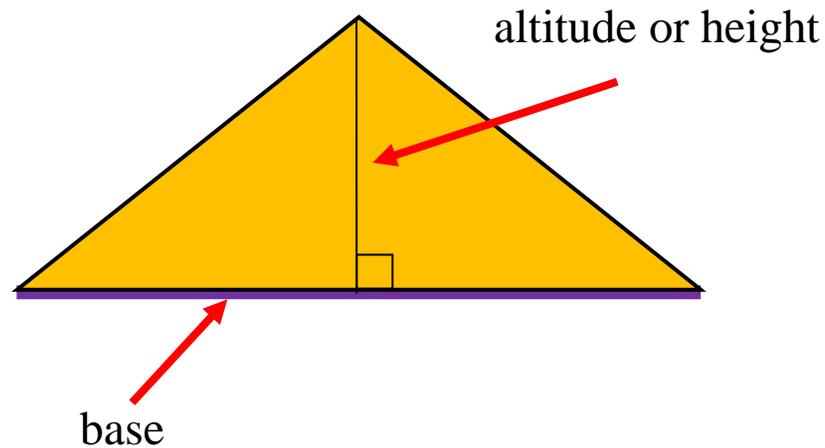
GCF. The largest factor of two or more numbers.

# height

height



height

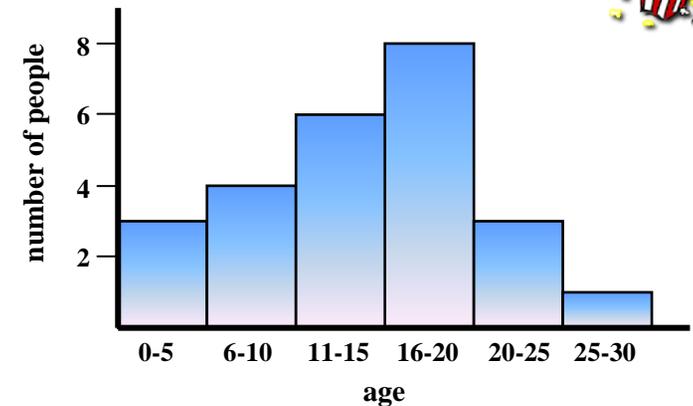


The perpendicular distance from a vertex to the opposite side of a plane figure.

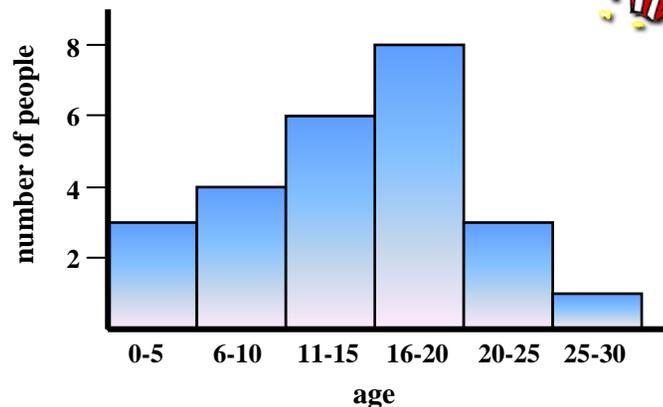
# histogram

# histogram

*Ages of People Attending a Movie*



*Ages of People Attending a Movie*



A bar graph in which the labels for the bars are numerical intervals.

# histogram

# improper fraction

---

improper  
fraction

$$\frac{5}{3}$$

The  
numerator is  
greater than  
the  
denominator.

improper  
fraction

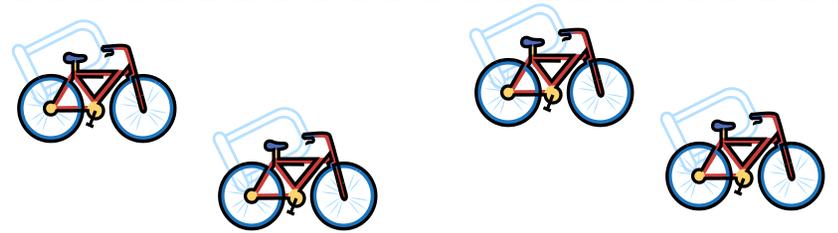
$$\frac{5}{3}$$

The  
numerator is  
greater than  
the  
denominator.

A fraction with  
a numerator  
greater than (or  
equal to) its  
denominator.

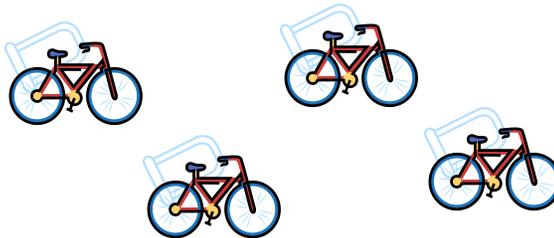
# independent variable

## independent variable



# Bikes	1	2	3	4
Wheels	2	4	6	8

## independent variable



# Bikes	1	2	3	4
Wheels	2	4	6	8

A variable in a mathematical equation whose value determines that of a dependent variable.

# inequality

---

$$5x + 6 < 20 - 2x$$

inequality



$$5x + 6 < 20 - 2x$$

inequality



A mathematical sentence that compares two unequal expressions using one of the symbols  $<$ ,  $>$ ,  $\leq$ ,  $\geq$ , or  $\neq$ .

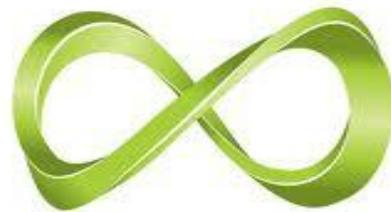
# infinite

---

## infinite



## infinite

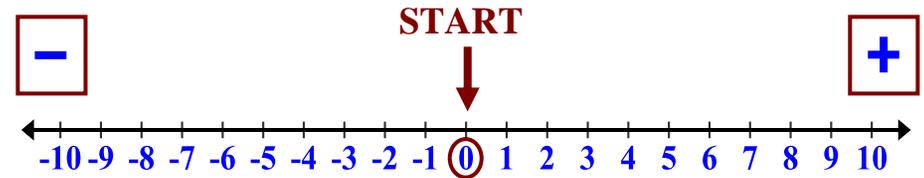


Having no  
boundaries or limits.

# integers

---

# integers



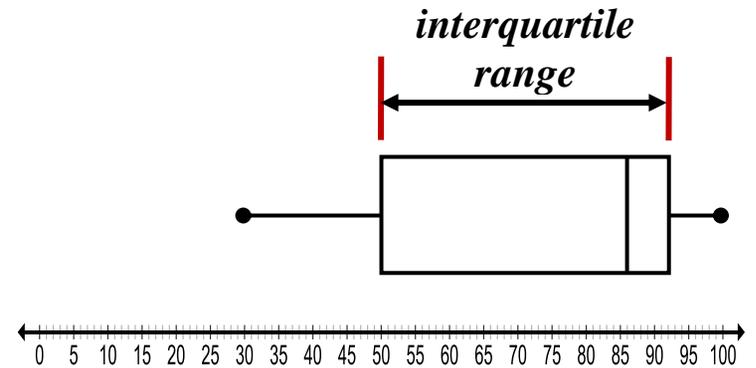
# integers



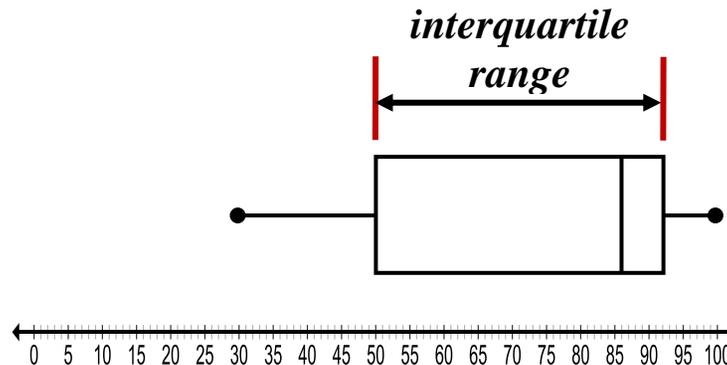
The set of whole numbers and their opposites.

# interquartile range

## interquartile range



## interquartile range

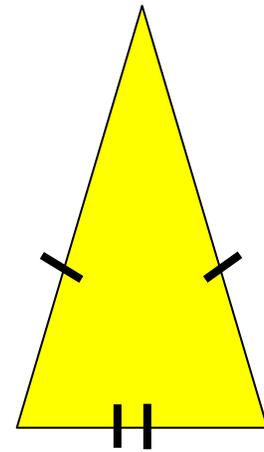


The difference between the upper quartile and the lower quartile.

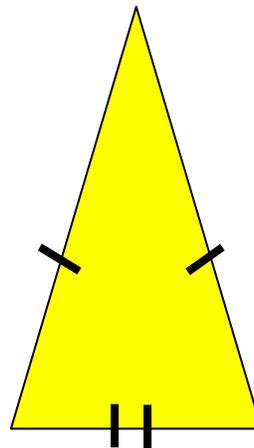
# isosceles triangle

---

isosceles  
triangle



isosceles  
triangle



A triangle that has at least two congruent sides.

# least common multiple

---

least common  
multiple

6, 12, 18, **24**, 30, 36, 42...  
8, 16, **24**, 32, 40, 48, 56...

LCM = **24**

---

least  
common  
multiple

6, 12, 18, **24**, 30, 36, 42...  
8, 16, **24**, 32, 40, 48, 56...

LCM = **24**

LCM. The smallest  
common multiple of  
a set of two or more  
numbers.

# less than

less than



$$3 < 5$$

less than

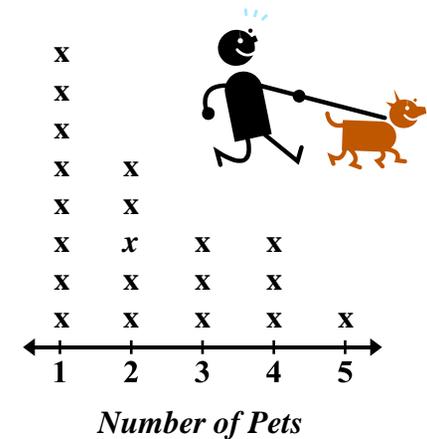


$$3 < 5$$

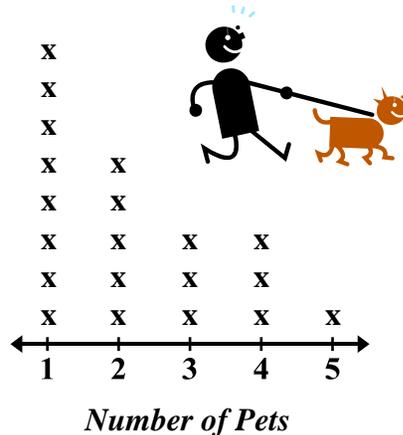
Less than is used to compare two numbers when the first number is smaller than the second number.

# line plot

# line plot



# line plot



Also known as a dot plot.  
A diagram showing  
frequency of data on a  
number line.

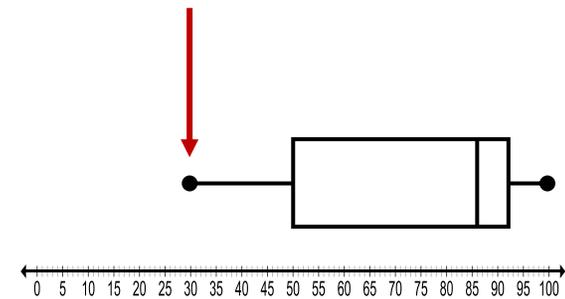
# lower extreme

---

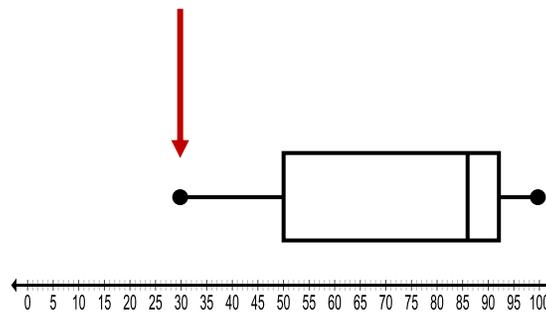
# lower extreme

---

lower extreme



lower extreme



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

# lower extreme

