

Vocabulary Cards and Word Walls

Revised: August 29, 2011

Important Notes for Teachers:

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

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

Bibliography of Definition Sources:

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

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

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

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

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

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

Student Reference Books, Everyday Mathematics, 2007.

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

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

absolute value

absolute
value

$$|-5| = 5$$

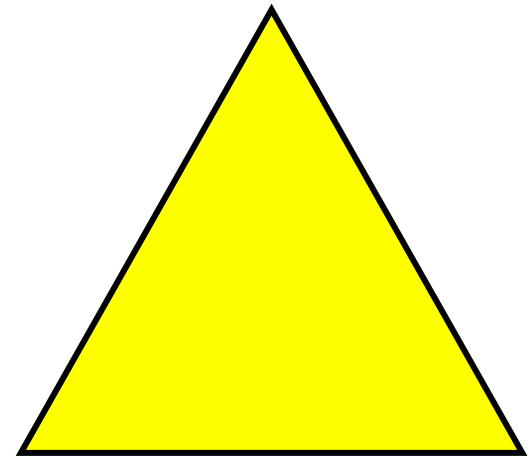
absolute
value

$$|-5| = 5$$

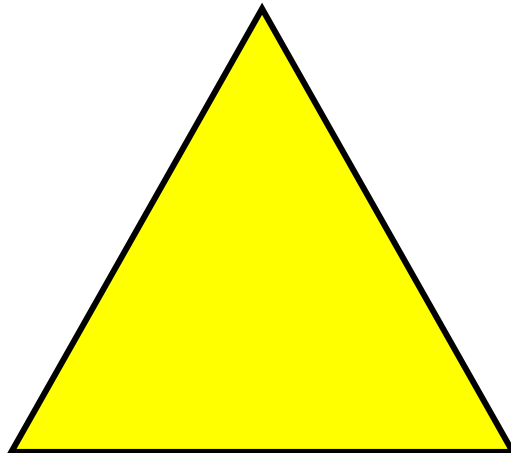
The distance of a number
from zero on the number
line. Always positive.

acute triangle

acute
triangle



acute
triangle



A triangle with no angle
measuring 90° or more.

additive inverse

additive
inverse

$$+3 + -3 = 0$$

$+3$ is the additive inverse, or opposite, of -3
 -3 is the additive inverse, or opposite, of $+3$

additive
inverse

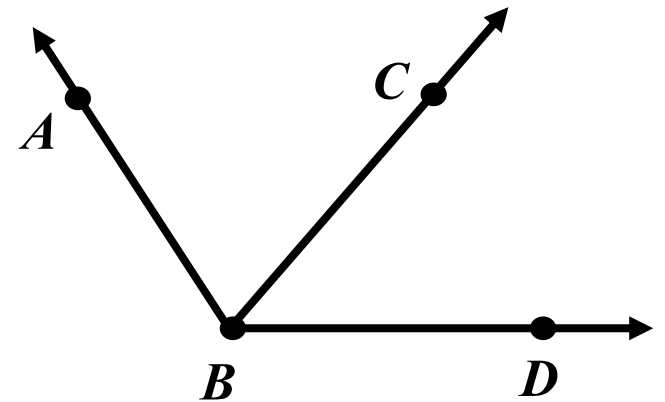
$$+3 + -3 = 0$$

$+3$ is the additive inverse,
or opposite, of -3
 -3 is the additive inverse,
or opposite, of $+3$

A number that is the same
distance from 0 on the
number line, but in the
opposite direction

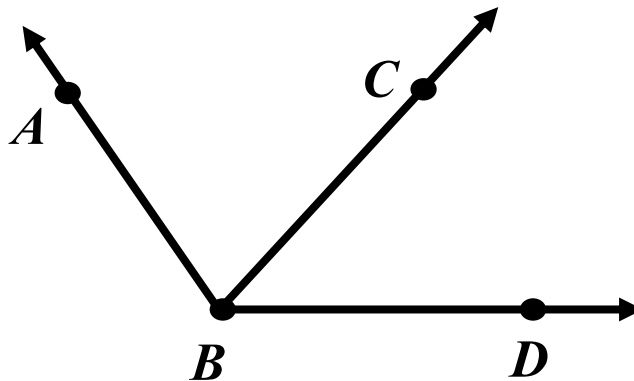
adjacent angle

adjacent
angle



$\angle ABC$ is adjacent to $\angle CBD$.

adjacent
angle



$\angle ABC$ is adjacent to $\angle CBD$.

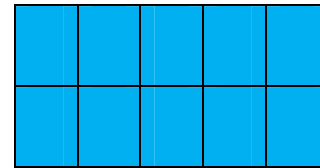
Two angles in a plane that have a common vertex and a common side. They do not have any common interior points. In other words, they do not share any “inside space.”

area

area

2 rows of 5 = 10 square units
or

$2 \times 5 = 10$ square units

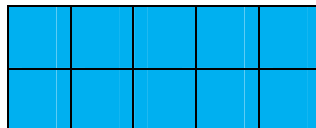


area

2 rows of 5 = 10 square units

or

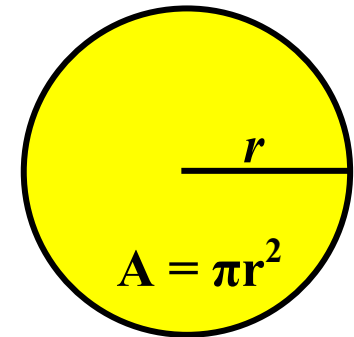
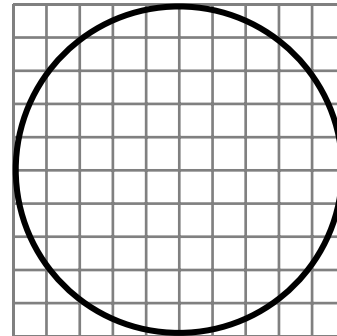
$2 \times 5 = 10$ square units



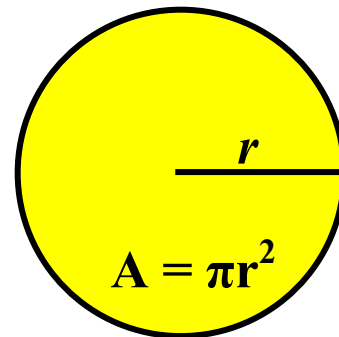
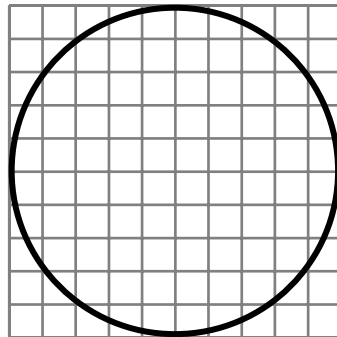
The measure, in square units, of the interior region of a 2-dimensional figure or the surface of a 3-dimensional figure.

area (circle)

area
(circle)



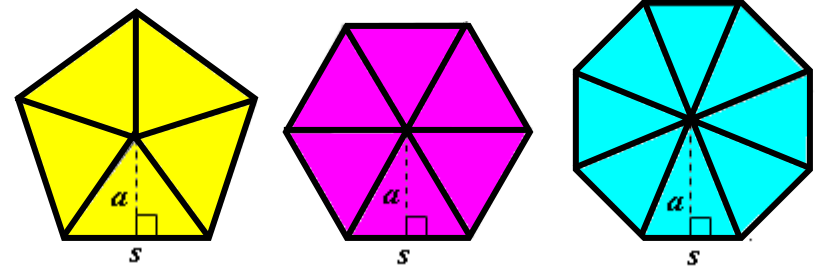
area
(circle)



The measure, in square units, of the interior region of a 2-dimensional figure. The formula for the area of a circle, $A = \pi r^2$.

area (regular polygon)

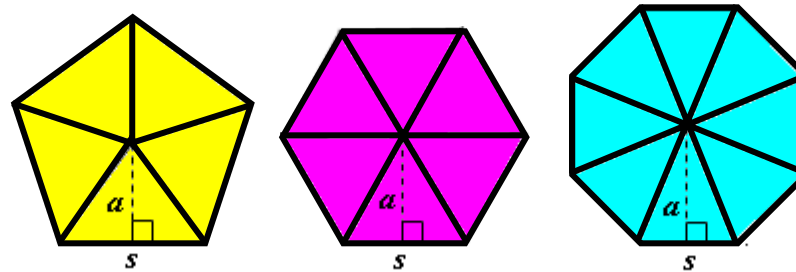
area (regular polygon)



$$A = \frac{1}{2}aP \text{ or } A = \frac{1}{2}a \cdot n \cdot s$$

a = apothem
 s = side length
 P = perimeter
 n = number of sides

area (regular polygon)



$$A = \frac{1}{2}aP \text{ or } A = \frac{1}{2}a \cdot n \cdot s$$

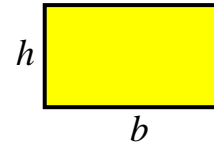
a = apothem
 s = side length
 P = perimeter
 n = number of sides

The area of a polygon is the measurement of the 2-dimensional region enclosed by the polygon.

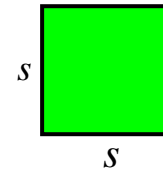
area (quadrilateral)

area (quadrilateral)

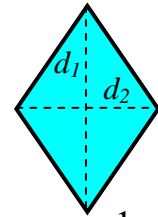
rectangle: $A = bh$



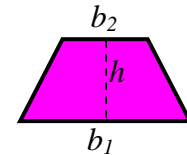
square: $A = s^2$



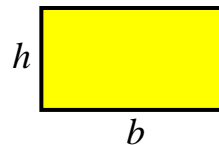
rhombus or kite: $A = \frac{1}{2}d_1d_2$



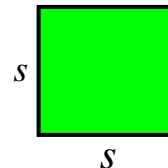
trapezoid: $A = \frac{1}{2}(b_1 + b_2)h$



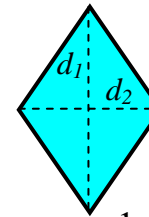
rectangle: $A = bh$



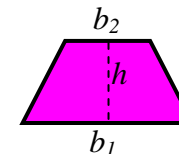
square: $A = s^2$



rhombus or kite: $A = \frac{1}{2}d_1d_2$



trapezoid: $A = \frac{1}{2}(b_1 + b_2)h$

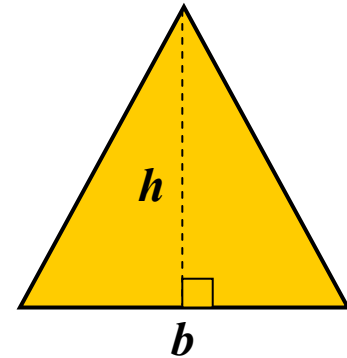


Area is the
measurement of the
2-dimensional
region enclosed by
the quadrilateral.

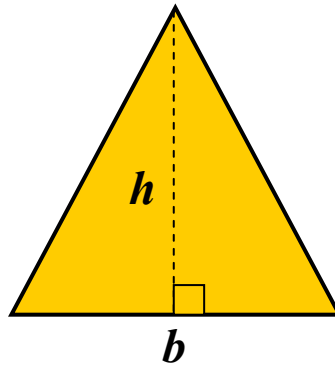
area (quadrilateral)

area (triangle)

area (triangle)



area (triangle)



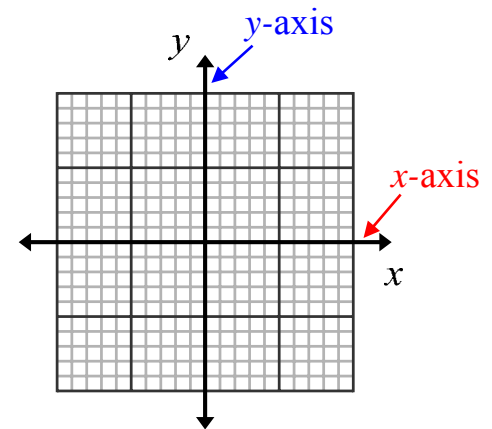
The area of a triangle is

$$A = \frac{1}{2}bh,$$

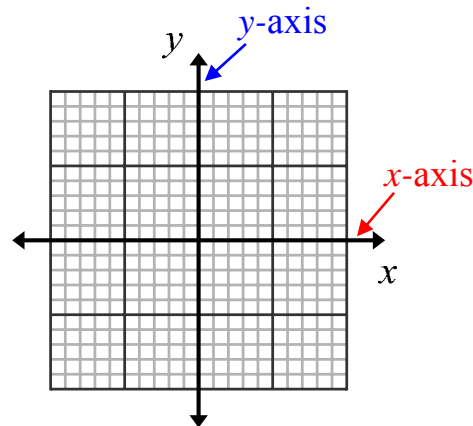
where b = the base and
 h = the vertical height.

axis

axis



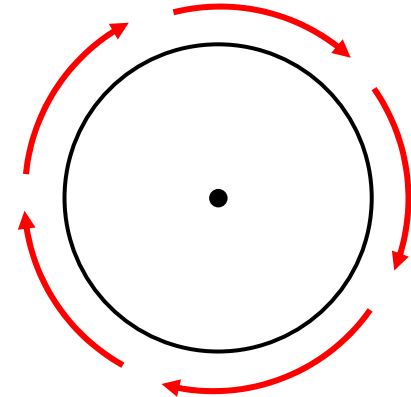
axis



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

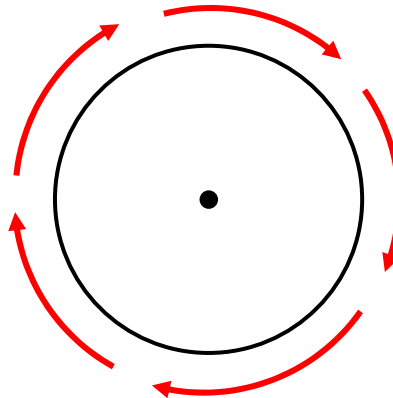
circumference

circumference



$$C = \pi d \text{ or } C = 2\pi r$$

circumference



$$C = \pi d \text{ or } C = 2\pi r$$

The distance around a circle, which equals a little more than three times its diameter.

coefficient

coefficient

$5x$
coefficient



coefficient

$5x$
coefficient



A numerical factor in a term
of an algebraic expression.

commissions

commissions



Mr. Bennie receives a 30% commission on each car that he sells.

commissions

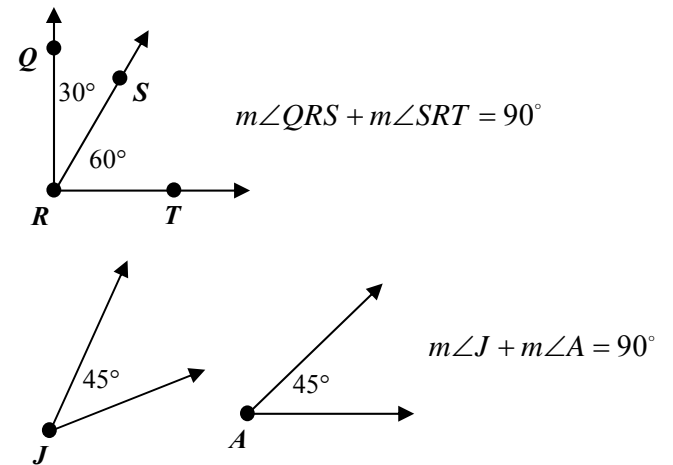


Mr. Bennie receives a 30% commission on each car that he sells.

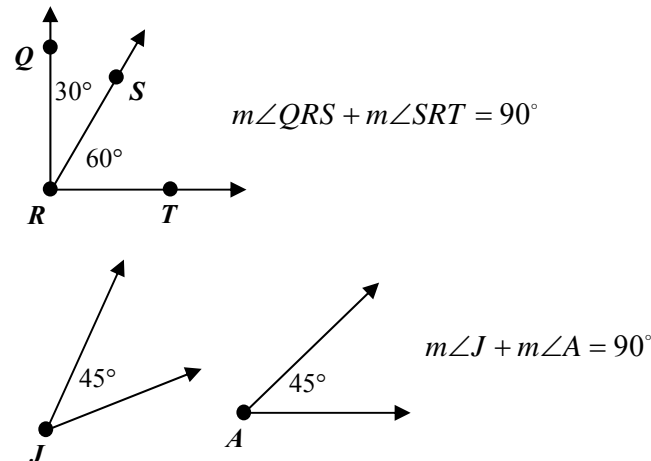
A fee charged by a broker or agent for his/her service in facilitating a transaction.

complementary angles

complementary
angles



complementary
angles



Two angles are complementary if they add up to 90° (right angle). They don't have to be next to each other.

compound event

compound event



What is the probability of tossing a head on a quarter and rolling a '3' on a die?

compound event

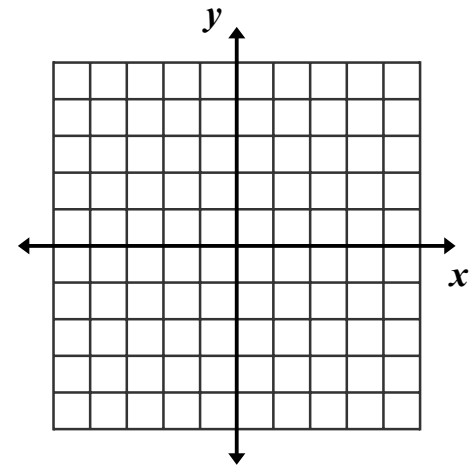


What is the probability of
tossing a head on a quarter and
rolling a '3' on a die?

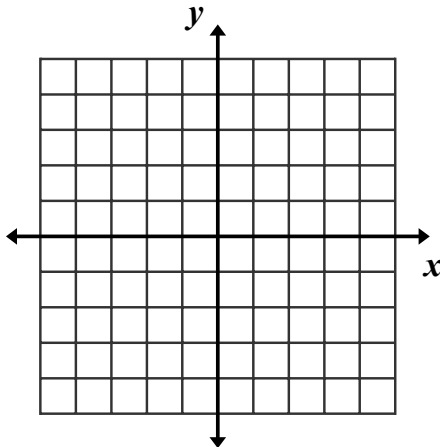
Two or more independent
events considered together.

coordinate plane

coordinate
plane



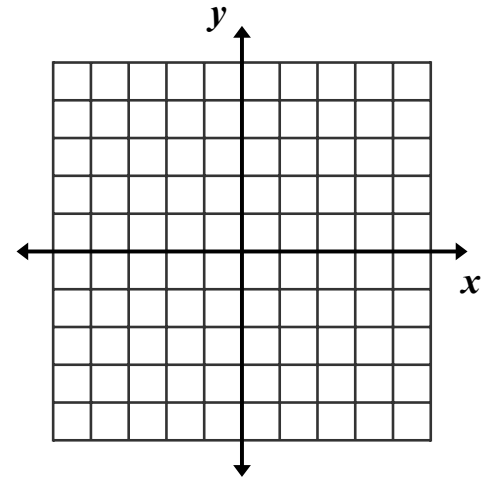
coordinate
plane



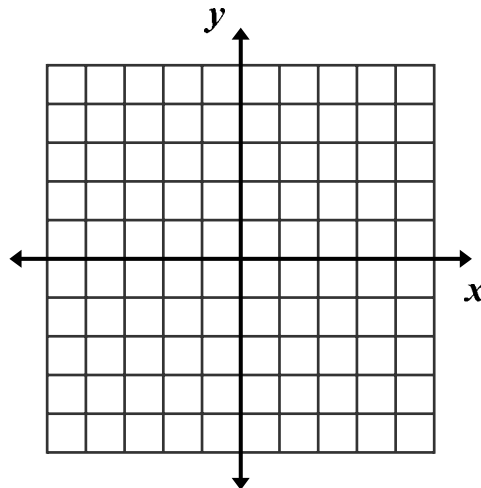
A 2-dimensional system in which the coordinates of a point are its distances from two intersecting, usually perpendicular, straight lines called axes. (Also called *coordinate grid* or *coordinate system*.)

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)

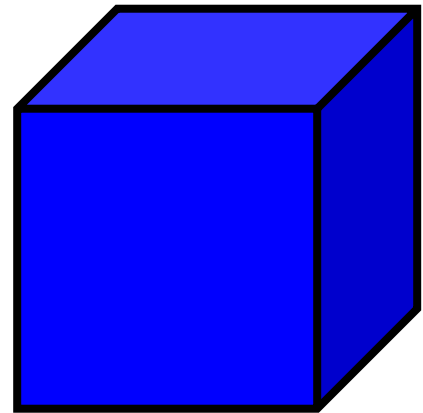
coordinates

(3, -5)
(x , y)

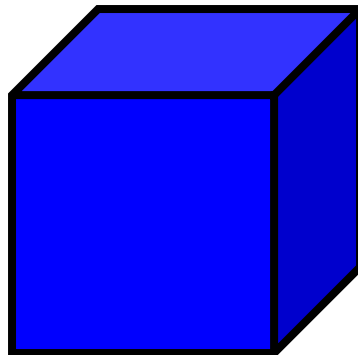
An ordered pair of
numbers that identify a
point on a coordinate
plane.

cube

cube



cube



A three-dimensional
shape with six square
faces.

data

data

**Number of School Carnival
Tickets Sold**

Kindergarten	22
1 st Grade	15
2 nd Grade	34
3 rd Grade	9
4 th Grade	16
5 th Grade	29
6 th Grade	11



**Number of School Carnival
Tickets Sold**

Kindergarten	22
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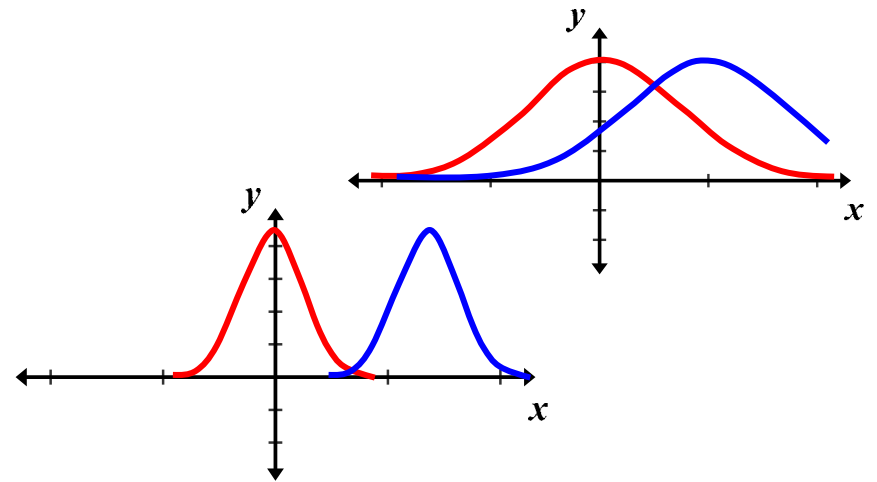


data

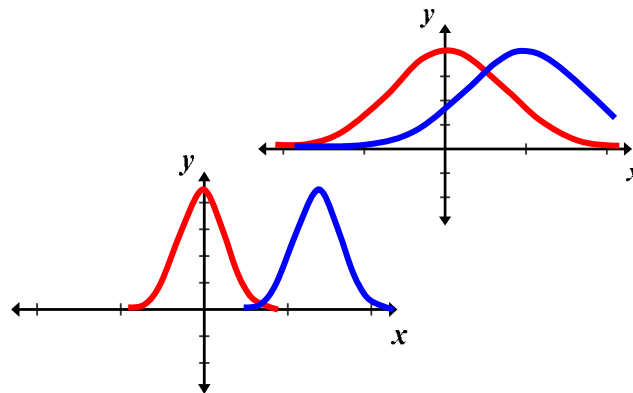
Information, especially
numerical information.
Usually organized for
analysis.

degree of visual overlap

degree of
visual overlap



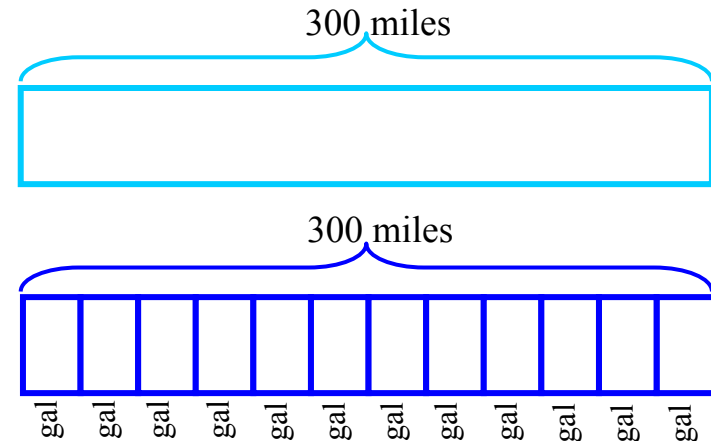
degree of
visual overlap



Describes the
separation (or lack
of separation)
between two
distributions.

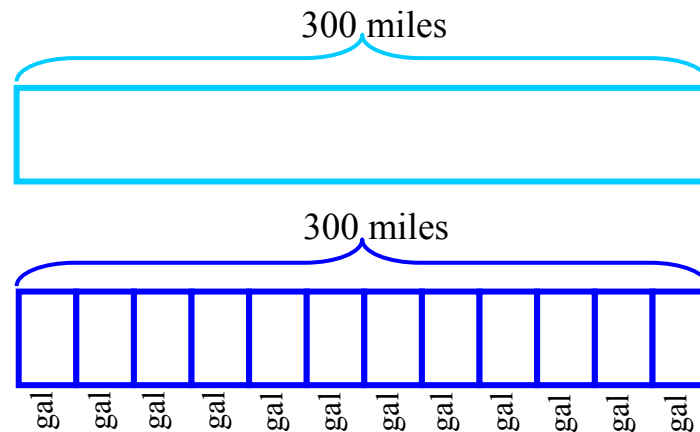
diagram

A car travels 300 miles on 12 gallons of gas.



diagram

A car travels 300 miles on 12 gallons of gas.



A drawing that
represents a
mathematical
situation.

diagram

Distributive Property

Distributive Property

Example:

$$5(x + 8) = (5 \cdot x) + (5 \cdot 8)$$

Distributive Property

Example:

$$5(x + 8) = (5 \cdot x) + (5 \cdot 8)$$

$a \cdot (b + c) = (a \cdot b) + (a \cdot c)$ and
 $a \cdot (b - c) = (a \cdot b) - (a \cdot c)$,
where a , b , and c stand for any real numbers.

equation

equation

$$9x + 3 = 4x - 7$$

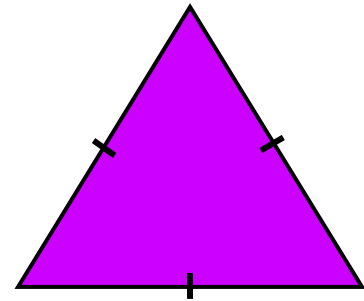
equation

$$9x + 3 = 4x - 7$$

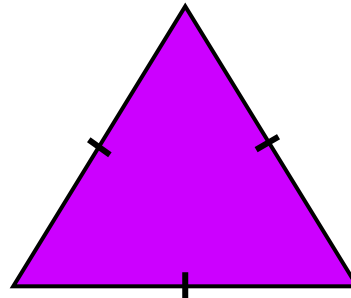
A statement that shows
two mathematical
expressions are equal.

equilateral triangle

equilateral triangle



equilateral triangle



A triangle whose sides are
all the same length.

estimate

estimate



How many jelly beans
are in the jar?

estimate



How many jelly
beans are in the jar?

To find a number close
to an exact amount; an
estimate tells *about*
how much or *about*
how many.

evaluate

evaluate

$$42 - 13 = n$$

$$n = 29$$

evaluate

$$42 - 13 = n$$

$$n = 29$$

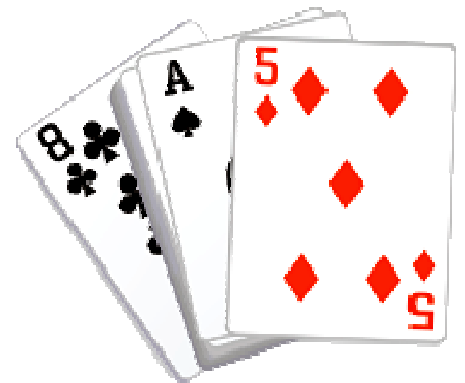
To find the value of a
mathematical expression.

event

event

What is the probability of drawing a five of diamonds out of a set of playing cards?

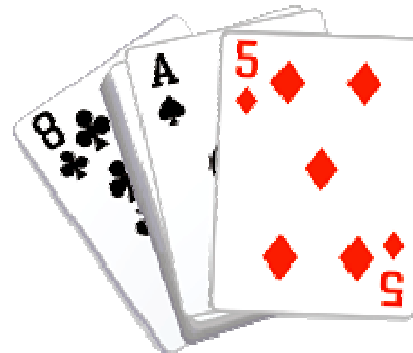
$$P(\text{5 of diamonds}) = \frac{1}{52}$$



event

What is the probability of drawing a five of diamonds out of a set of playing cards?

$$P(\text{5 of diamonds}) = \frac{1}{52}$$



A set of outcomes to which a probability is assigned.

expression

expression

$$5x + 3$$

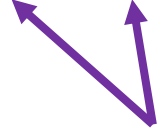
expression

$$5x + 3$$

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

factor

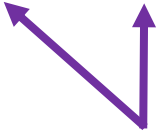
factor

$$2 \cdot 6 = 12$$


factors

A diagram with two purple arrows pointing from the word 'factors' to the numbers 2 and 6 in the equation above.

factor

$$2 \cdot 6 = 12$$


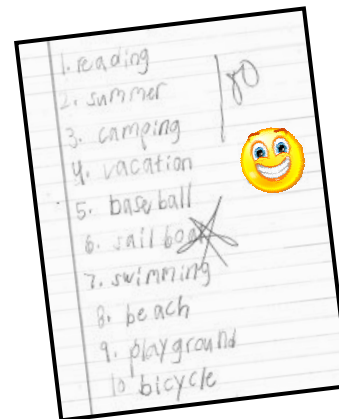
factors

A diagram with two purple arrows pointing from the word 'factors' to the numbers 2 and 6 in the equation above.

An integer that divides
evenly into another.

frequency

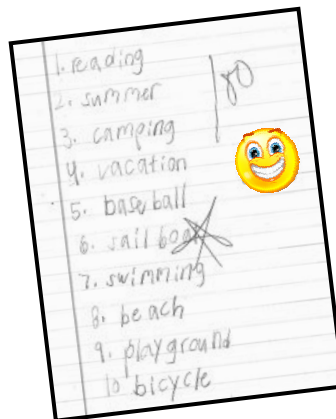
frequency



frequency

Score	Tally	Frequency
1	/	1
2	/	1
3	///	3
4	/	1
5	////	4
6	####	5
7	#### /	6
8	####	5
9	///	3
10	/	1

frequency



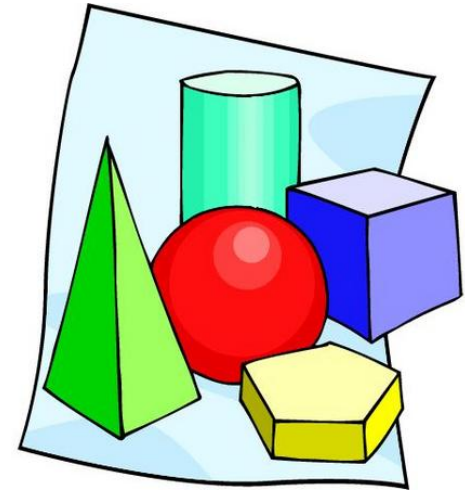
frequency

Score	Tally	Frequency
1	/	1
2	/	1
3	///	3
4	/	1
5	////	4
6	####	5
7	#### /	6
8	####	5
9	///	3
10	/	1

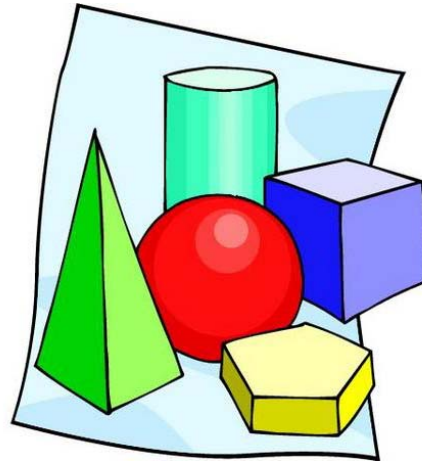
The number of times an event occurs within a specific time period.

geometric figure

geometric figure



geometric figure

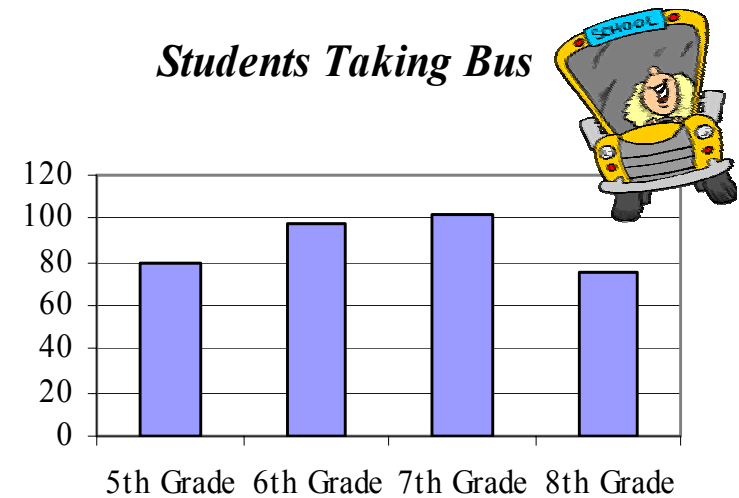


Any combination of
points, lines, planes, or
curves in two or three
dimensions.

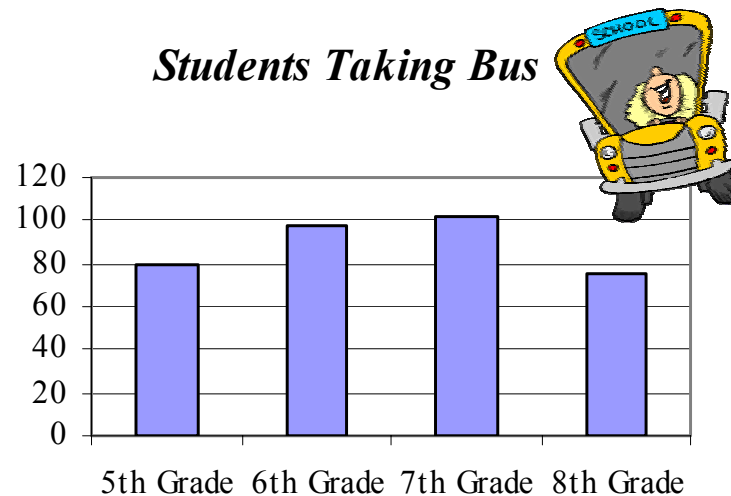
graph

graph

Students Taking Bus



Students Taking Bus



A pictorial device used to show a numerical relationship.

graph

gratuities

gratuities



Samantha paid the waiter a \$7.50 tip for the delicious dinner he served.

gratuities



Samantha paid the waiter a \$7.50 tip for the delicious dinner he served.

Something given voluntarily or beyond obligation usually for some service: tip.

inequality

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

inequality



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

inequality

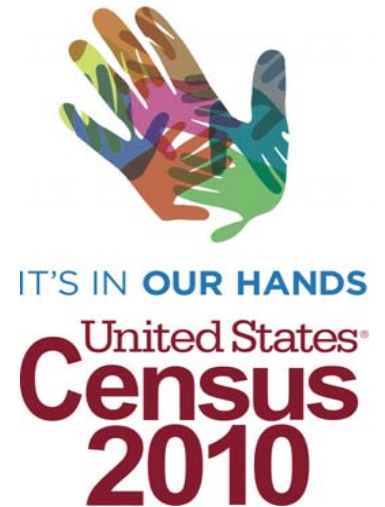


A mathematical sentence that compares two unequal expressions using one of the symbols $<$, $>$, \leq , \geq , or \neq .

inferences

inferences

Every 10 years, the United States Census Bureau surveys the entire United States and organizes all the data they collect. The government then uses statistics to organize and analyze the data to make logical conclusions about what kind of things may happen to us in the future.



inferences

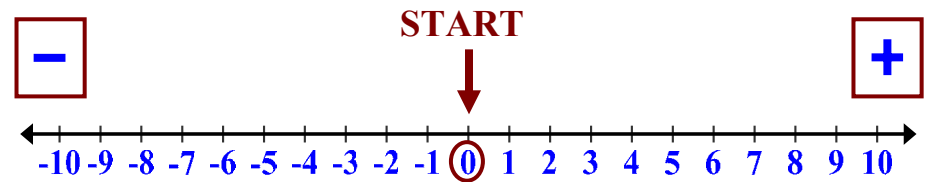
Every 10 years, the United States Census Bureau surveys the entire United States and organizes all the data they collect. The government then uses statistics to organize and analyze the data to make logical conclusions about what kind of things may happen to us in the future.



The act or process of deriving logical conclusions from premises known or assumed to be true.

integers

integers



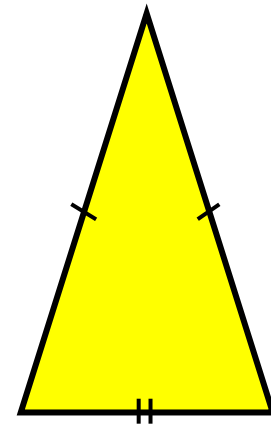
integers



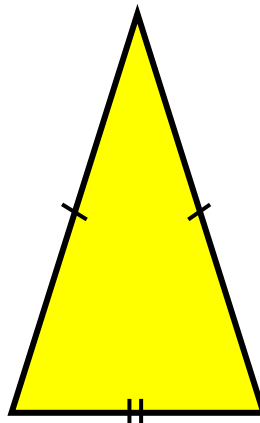
The set of whole numbers and their opposites.

isosceles triangle

isosceles triangle



isosceles triangle



A triangle that has at least
two congruent sides.

likely event

likely event



$$P(\text{number} < 5) = \frac{4}{6} = \frac{2}{3}$$

likely event



$$P(\text{number} < 5) = \frac{4}{6} = \frac{2}{3}$$

An event that is most
likely to happen.

long division

long
division

$$\begin{array}{r} 332 \text{ R } 0 \\ 23 \overline{) 7636} \\ \underline{-69} \\ 73 \\ \underline{-69} \\ 46 \\ \underline{-46} \\ 0 \end{array}$$

long
division

$$\begin{array}{r} 332 \text{ R } 0 \\ 23 \overline{) 7636} \\ \underline{-69} \\ 73 \\ \underline{-69} \\ 46 \\ \underline{-46} \\ 0 \end{array}$$

A standard procedure
suitable for dividing simple
or complex multi-digit
numbers.

markdowns

markdowns



An item originally priced at \$55 is marked 25% off. What is the sale price?

First, I'll find the markdown. The markdown is 25% of the original price of \$55, so:

$$x = (0.25)(55) = 13.75$$

By subtracting this markdown from the original price, I can find the sale price:

$$55 - 13.75 = 41.25$$

The sale price is \$41.25.

markdowns



An item originally priced at \$55 is marked 25% off. What is the sale price?

First, I'll find the markdown. The markdown is 25% of the original price of \$55, so:

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By subtracting this markdown from the original price, I can find the sale price:

$$55 - 13.75 = 41.25$$

The sale price is \$41.25.

The amount by which a price is reduced.

markups

A computer software retailer used a markup rate of 40%. Find the selling price of a computer game that cost the retailer \$25.

The markup is 40% of the \$25 cost, so the markup is:

$$(0.40)(25) = 10$$

Then the selling price, being the cost plus markup, is:

$$25 + 10 = 35$$

The item sold for \$35. A \$10 profit.



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markups

An amount added to the cost price to determine the selling price; broadly: profit

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 taking the absolute value of each deviation. (eliminate the negative)

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

mean absolute deviation



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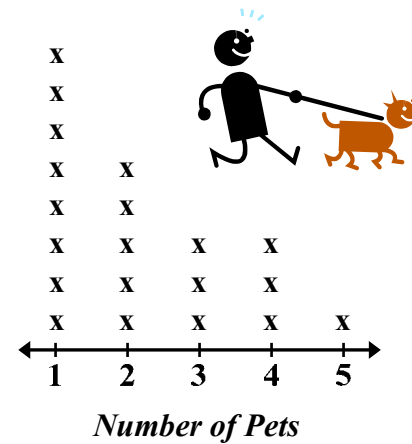
Step 3: Make the deviation 'absolute' by taking the absolute value of each deviation. (eliminate the negative)

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



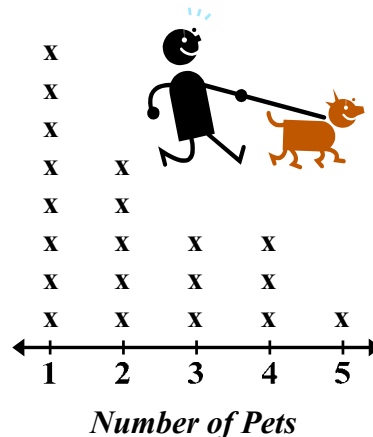
Examples:

Mode = 1

Median = 2

Mean = 2.3

measure of center



Examples:

Mode = 1

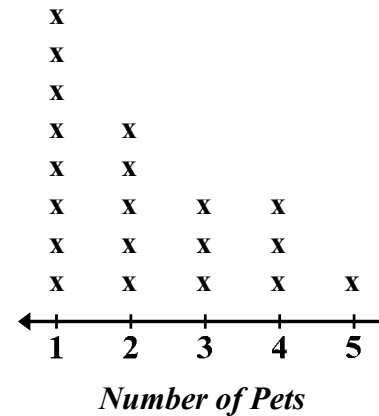
Median = 2

Mean = 2.3

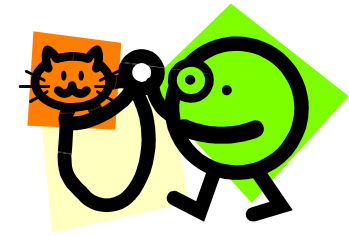
An average; a single value that is used to represent a collection of data. Three commonly used types of averages are mode, median, and mean. (Also called measures of central tendency or measures of average.)

measure of variation

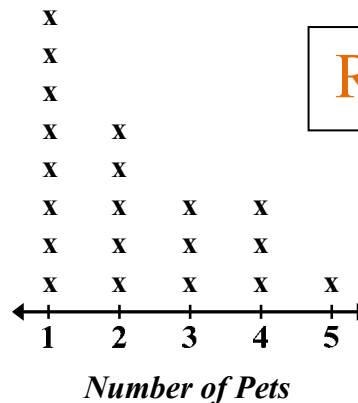
measure of variation



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.)

