

# Glossary 

E-Elementary
M - Middle School
H-High School

Copyright Statement for this Assessment and Evaluation Services Publication
Authorization for reproduction of this document is hereby granted to persons acting in an official capacity within the State System of Public Education as defined in Section 228.041(1), Florida Statutes. The copyright notice at the bottom of this page must be included in all copies.

The Administrator
Assessment and Evaluation Services
Florida Department of Education
Turlington Building, Room 414
325 West Gaines Street
Tallahassee, Florida 32399-0400
Copyright © 2000
State of Florida
Department of State

## GLOSSARY

The terms defined in this glossary pertain to the Sunshine State Standards in mathematics for grades 3-10 and the content assessed on FCAT in mathematics.


Acute angle an angle that measures less than $90^{\circ}$ and greater than $0^{\circ}$.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Additive identity the number zero (0); that is, adding 0 does not change a number's value (e.g., $5+0=5$ ).

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Additive inverse a number and its additive inverse have a sum of zero (0) H Property (e.g., in the equation $3+-3=0,3$ and -3 are additive inverse of each other).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Algebraic equation a mathematical sentence in which two expressions are connected by an equality symbol.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Algebraic expression an expression containing numbers and variables
(e.g., $7 x$ ), and operations that involve numbers and variables (e.g., $2 x+y$ or $3 a-4$ ). Algebraic expressions do not contain equality or inequality symbols.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Algebraic order the order of performing computations is parentheses first, H of operations then exponents, followed by multiplication and/or division, then addition and/or subtraction. For example:
$5+(12-2) \div 2-3 \times 2$
$5+10 \div 2-3 \times 2$
$5+5-6$
10-6
4
Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Algebraic rule a mathematical expression that contains variables E and describes a pattern or relationship.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Altitude the perpendicular distance from a vertex in a polygon to its opposite side.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Angle the shape made by two rays extending from a common end point, E the vertex. Measures of angles are described using the degree system.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Area the inside region of a two-dimensional figure measured in square E units (e.g., a rectangle with sides of 4 units by 6 units contains 24 square units or has an area of 24 square units).

Mark on the line your knowledge of this word.


Associative the way in which three or more numbers are grouped for property addition or multiplication does not change their sum or product [e.g., $(5+6)+9=5+(6+9)$ or $(2 \times 3) \times 8=2 \times(3 \times 8)]$.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Axes (of a graph) the horizontal and vertical number lines used in a rectangular graph or coordinate grid system.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Bar graph a graph that uses bars to display data.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Base the line or plane upon which a figure is thought to rest.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Break a zigzag on the line of the $x$ - or $y$-axis in a line or bar graph indicating that the data being displayed do not include all of the values that exist on the number line used. Also called a Squiggle.

Mark on the line your knowledge of this word.

| Explain in your own words |  |
| :--- | :--- |

Capacity the amount of space that can be filled. Both capacity and volume are used to measure three-dimensional spaces; however, capacity usually refers to fluids, whereas volume usually refers to solids.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Central angle an angle that has its vertex at the center of a circle.
M

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Chart a data display.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

## Circle graph a data display.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Circumference the perimeter of a circle is called its circumference.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Closed figure a two-dimensional figure whose beginning and ending points meet, such that the plane in which the figure lies is divided into tow parts-the part inside the figure and the part outside the figure (e.g., circles, squares, rectangles).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Commutative property the order in which two numbers are added or multiplied does not change their sum or product (e.g., $2+3=3+2$ or $4 \times 7=7 \times 4$ ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Complementary angles two angles, the sum of which is exactly $90^{\circ}$.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |



Concrete having a definite form or relating to an actual object. representations of numbers

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Congruent a term describing figures or objects that are the same shape and size.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Coordinate grid or a network of evenly spaced, parallel, horizontal and vertical lines especially designed for locating points, displaying data, or drawing maps.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Coordinates numbers that correspond to points on a coordinate graph in the form ( $x, y$ ), or a number that corresponds to a point on a number line.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Counting principle if a first event has $n$ outcomes and a second event has $M$ $m$ outcomes, then the first event followed by the second event has $n \times m$ outcomes.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Customary units the units of measure developed and used in the United States. Customary units for length are inches, feet, yards, and miles. Customary units for weight are ounces, pounds, and tons. Customary units for volume are cubic inches, cubic feet, and cubic yards. Customary units for capacity are fluid ounces, cups, pints, quarts, and gallons.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Cylinder a three-dimensional figure with two parallel bases that are M congruent circles.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  | including pictographs, circle graphs, single-, double-, or triple-bar and line graphs, histograms, stem-and-leaf plots, box-and-whiskers plots, and scatter plots.

Mark on the line your knowledge of this word.


Decimal number any number written with a decimal point in the number.
A decimal number falls between two whole numbers
(e.g., 1.5 falls between 1 and 2). Decimal numbers smaller than 1 are sometimes called decimal fractions
(e.g., five-tenths is written 0.5).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Diameter a line segment from any point on the circle passing through the center to another point on the circle.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Direct measure obtaining the measure of an object by using measuring devices, either standard devices of the customary or metric systems, or nonstandard devices such as a paper clip or pencil.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Distributive property for any real numbers $a, b$, and $x, x(a+b)=a x+b x . \quad M$
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Divisible a term describing a number capable of being divided into E equal parts without a remainder.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Effects of operations the results of applying an operation to given numbers (e.g., adding two whole numbers results in a number greater than or equal to the original numbers.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Empirical the likelihood of an event happening that is based on probability experience and observation rather than on theory.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Enlargement an increase in size in all dimensions by a uniform amount.
Mark on the line your knowledge of this word.


Equation a mathematical sentence (e.g., $2 x=10$ ) that equates one
E expression ( $2 x$ ) to another expression (10).


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Equivalent expressions expressions that have the same value but are presented in a different format using the properties of numbers. [e.g., $a x+b x=(a+b) x]$.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Equivalent forms the same number expressed in different forms

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Explain in words directions requesting a written description of the procedures for finding the solution to the problem presented.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Exponent
the number of times the base occurs as a factor. For M (exponential form) example, $2^{3}$ is the exponential form of $2 \times 2 \times 2$. The numeral 2 is called the base, and the numeral 3 is called the exponent.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Expression a collection of numbers, symbols, and/or operation signs that stands for a number.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Extrapolate to estimate or infer a value or quantity beyond the known range.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Face one of the plane surfaces bounding a three-dimensional figure (a side).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Factor a number or expression that divides exactly another number (e.g., 1, 2, 4, 5, 10, and 20 are factors of 10).

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words | Example |
| Use It All the <br> Time |  |
| Facts/Rules/Formulas | Picture or Graph |

Finite graph a graph having definable limits.

| Explain in your own words |  |
| :--- | :--- |
| Never Heard |  |
| of It |  |

Flip a transformation that produces the mirror image of a geometric figure. E Also called a Reflection.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar |  |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Fraction any part of a whole is called a fraction (e.g., one-half written in fractional form is $\frac{1}{2}$ ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Function a relation in which each value of $x$ is paired with a unique value of y .

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |

Function table a table of $x$ - and $y$-values (ordered pairs) that represents the function, pattern, relationship, or sequence between the two variables.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Grid a network of evenly spaces, parallel, horizontal, and vertical lines.

| Explain in your own words |  |
| :--- | :--- |
| Never Heard <br> of It |  |
| Facts/Rules/Formulas |  |

Height a line segment extending from the vertex or apex of a figure to its base and forming a right angle with the base or basal point.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Hypotenuse in a right triangle, the side opposite the right angle.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Hypothesis a proposition or supposition developed to provide a basis for further investigation or research.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Indirect measure the measurement of an object through the known measure of another object.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Inequality a sentence that states one expression is greater than, greater than or equal to, less than, less than or equal to, or not equal to, another expression (e.g., $a \neq 5$ or $x<7$ ).

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Integers the numbers in the set $\{\ldots,-4,-3,-2,-1,0,1,2,3,4, \ldots\}$.

| Explain in your own words |
| :--- | :--- |
| Never Heard <br> of It |
| Facts/Rules/Formulas the line your knowledge of this word. |

Intercept the value of a variable when all other variables in the equation equal zero (0). On a graph, the values where a function crosses the axes.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Intersection the point at which two lines meet.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

$\begin{array}{ll}\text { Inverse operation } & \text { an action that cancels a previously applied action. } \\ & \text { For example, subtraction is the inverse operation }\end{array}$ of addition.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Irrational number a real number that cannot be expressed as a ratio of two numbers (e.g., $\pi$ ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Isosceles triangle a triangle with two congruent sides and two congruent angles.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Labels (for a graph) the titles given to a graph, the axes of a graph, or to the scales on the axes of a graph.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ | Somewhat Familiar |
| :---: | :---: |
| Explain in your own words | Example It All the |
| Time |  |

Length a one-dimensional measure that is the measurable property of line segments.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Likelihood the chance that something is likely to happen. See Probability.

Mark on the line your knowledge of this word.

| Explain in your own words |  | Example |
| :---: | :---: | :---: |
| Facts/Rules/Formulas |  | Picture or Graph |

Line a straight line that is endless in length.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | P icture or Graph |

Linear equation an algebraic equation in which the variable quantity or quantities are in the first power only and the graph is a straight line [e.g., $20=2(w+4)+2 w$ and $y=3 x+4]$.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words | Somewhat Familiar <br> Use It All the <br> Time |
| Facts/Rules/Formulas |  |

Mark on the line your knowledge of this word.


Line segment a portion of a line that has a defined beginning and end (e.g., the line segment $A B$ is between point $A$ and point B).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Mean the arithmetic average of a set of numbers.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Median the middle point of a set of ordered numbers where half
E of the numbers are above the median and half are below it.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Metric units the units of measure developed in Europe and used in most of the world. Like the decimal system, the metric system uses the base 10. Metric units for length are milligrams, grams, and kilograms. Metric units for volume are cubic millimeters, cubic centimeters, and cubic meters. Metric units for capacity are milliliters, centiliters, liters, and kiloliters.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :--- | :--- |
| Explain in your own words | Somewhat Familiar <br> Use It All the <br> Time |
| Facts/Rules/Formulas |  |

Midpoint of a the point on a line segment that divides it into two equal Line segment parts.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Mode the score or data point found most often in a set of numbers.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Multiples the numbers that result from multiplying a given number by the E set of whole numbers (e.g., the multiples of 15 are $0,15,30,45$, 60,75 , etc.).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Multiplicative identity the number one (1), that is, multiplying by 1 does not change a number's value (e.g., $5 \times 1=5$ ).

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |



| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/F ormulas |  | Picture or Graph |

Negative exponent used in scientific notation to designate a number smaller than one (1) (e.g., $3.45 \times 10^{-2}$ equals 0.0345 ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Nonstandard units objects such as blocks, paper clips, crayons, of measure or pencils that can be used to obtain a measure.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Number line a line on which numbers can be written or visualized.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Obtuse angle an angle with a measure of more than $90^{\circ}$ but less than $180^{\circ}$.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Odds the ratio of one event occurring to it not occurring.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

any mathematical process, such as addition, subtraction, multiplication, division, raising to a power, or finding the square root.


| Explain in vour own |  |
| :--- | :--- |
|  |  |
|  | Picture or |
|  |  |

Operational shortcut a method having fewer arithmetic calculations.
Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Ordered pair the location of a single point on a rectangular coordinate system where the digits represent the position relative to the $x$-axis and $y$-axis [e.g., $(x, y)$ or $(3,4)$ ].

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Organized data data arranged in a display that is meaningful and that assists in the interpretation of the data. See Data displays.

Mark on the line your knowledge of this word.


Origin the point in the coordinate plane at which the horizontal axis ( $x$-axis) intersects the vertical axis ( $y$-axis). The point has coordinates $(0,0)$.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Parallel lines two lines in the same plane that never meet. Also, lines with equal slopes.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Pattern a predictable or prescribed sequence of numbers,
(relationship) objects, etc. Patterns and relationships may be described or presented using manipulatives, tables, graphics (pictures or drawings), or algebraic rules (functions). Also called a Relation.

| Mark on the line your knowledge of this word. |
| :--- |
| Explain in your own words <br> of It |
| Fomewhat Familiar |

Percent a special-case ratio in which the second term is always 100.
The ratio is written as a whole number followed by a percent sign (e.g., $25 \%$ means the ratio of 25 to 100).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
| Facts/Rules/Formulas | Picture or Graph |

Perpendicular a line describing two lines or two line segments that cross to form a right angle.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

$\mathbf{P i}(\pi) \quad$ the symbol designating the ratio of the circumference of a circle to its diameter, represented as either 3.14 or $\frac{22}{7}$ ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Pictograph a data display.
M


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Place value the position of a single digit in a whole number or decimal number containing one or more digits.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Planar cross-section the intersection of a plane and a three-dimensional H figure.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Plane figure a two-dimensional figure that lies entirely within a single plane.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Point a location in space that has no discernible length or width.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar |  |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Polygon a closed plane figure whose sides are straight lines that are connected end-point to end-point.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Prime number any whole number with only two factors, 1 and itself


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Proof a set of steps that demonstrates the truth of a given statement. Each step can be justified with a reason, such as a given, a definition, an axiom, or a previously proven property.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Proportion a mathematical sentence stating that two ratios are equal. M

| Mark on the line your knowledge of this word. |
| :--- |
| Explain in your own words <br> of It |
| Facts/Reard |

Pyramid a three-dimensional figure whose base is a polygon and whose faces are triangles with a common vertex.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Pythagorean the square of the hypotenuse (c) of a right triangle as shown in the equation $c^{2}=a^{2}+b^{2}$.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Quadrant any of the four regions formed by the axes in a rectangular coordinate system.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Radical an expression that has a root (square root, cube root, etc.) (e.g., $\sqrt{25}$ is a radical). Any root can be specified by an index number, $b$, in the form $\sqrt[b]{a}$ (e.g., $\sqrt[3]{8}$ ). A radical without an index number is understood to be a square root.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |


| Radical sign the symbol ( $\sqrt{ }$ the number is | ed before a num icand. | show that |
| :---: | :---: | :---: |
| Mark on the line your knowledge of this word. |  |  |
|  |  |  |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Radicand a number appears with a radical sign (e.g., in $\sqrt{25}$, 25 is the radicand).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Radius a line segment extending from the center of a circle or sphere to a point on the circle or sphere.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Range the lowest value (L) in a set of numbers through the highest value $(\mathrm{H})$ in the set. When the width of the range is expressed as a single number, the range is calculated as the difference between the highest and lowest values. More advanced presentations show the range calculated as ( $\mathrm{H}-\mathrm{L}+1$ ). The result of either calculation would be considered correct.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Rate/distance calculations involving rates, distances, and time intervals, based on the distance, rate, time formula ( $D=r t$ ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Ratio the comparison of two quantities (e.g., the ratio of $a$ and $b$ is E $\frac{a}{b}$, where $b \neq 0$.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

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

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Ray a portion of a line that begins at a point and goes on forever in one direction.

| Mark on the line your knowledge of this word. |
| :--- |
| Never Heard <br> of It |
| Factain in your own words |

Real number all rational and irrational numbers.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Reciprocal see Multiplicative inverse.
H

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Reflexive axiom a number or expression is equal to itself (e.g., $a b=a b$ ).
H of equality

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Regular polygon a polygon that is both equilateral and equiangular.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

$\begin{array}{lll}\text { Relation } & \text { see Pattern. } & E \\ \text { (relationship) } & \end{array}$

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar |  |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Relative size the size of one number in comparison to the size of another number or numbers.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Right angle an angle whose measure is exactly $90^{\circ}$. E

| Explain in your own words |
| :--- | :--- |
| of It | Mark on the line your knowledge of this word.

Right circular a cylinder in which the bases are parallel circles cylinder perpendicular to the side of the cylinder.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Right prism or a three-dimensional figure (polyhedron) with M rectangular solid congruent, polygonal bases and lateral faces that are all parallelograms.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Right triangle finding the measures of missing sides or angles of a
right triangle when given the measures of other sides or angles.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Rise the change in $y$ going from one point of $x$ to another (the vertical change on the graph).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Rotation a transformation of a figure by turning it about a center point or axis. The amount of rotation is usually expressed in the number of degrees (e.g., a $90^{\circ}$ rotation). Also called a Turn.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Rule a mathematical expression that describes a pattern or relationship, or a written description of the pattern or relationship.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Run the change in $x$ going from one point of $y$ to another (the horizontal change on the graph.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Scale model a model or drawing based on a ratio of the dimensions for the model and the actual object it represents (e.g., a map).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Scales the numeric values assigned to the axes of a graph.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
| Facts/Rules/Formulas | Picture or Graph |

Scatter Plot a graph of data points, usually from an experiment, that is used to observe the relationship between two values.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  | small numbers using exponents in which a number is expressed as the product of a power of 10 and a number that is greater than or equal to one (1) and less than 10 (e.g., $7.59 \times 10^{5}=759,000$ ). It is based on the idea that it is easier to read exponents than it is to count zeros. If a number is already a power of 10 , it is simply written $10^{27}$ instead of $1 \times 10^{27}$.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Sequence an ordered list with either a constant difference (arithmetic) or a constant ratio (geometric).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Side the edge of a geometric figure (e.g., a triangle has three sides).


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Similar figures figures that are the same shape, have corresponding, congruent angles, and have corresponding sides that are proportional in length.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Similarity a term describing figures that are the same shape but are not necessarily the same size or in the same position.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Slide to move along in constant contact with the surface in a vertical, horizontal, or diagonal direction. Also called a Translation.

Mark on the line your knowledge of this word.


Slope the constant, $m$, in the linear equation for the slope-intercept form $y=m x+b$. The ratio of change in the vertical axis ( $y$-axis) to each unit change in the horizontal axis ( $x$-axis) in the form $\frac{\text { rise }}{\text { run }}$ or $\frac{D y}{D x}$.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  |  |  |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Solid figures three-dimensional figures that completely enclose a portion of space (e.g., a rectangular solid, cube, sphere, right circular cylinder, right circular cone, and square pyramid).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |



Square root a positive real number that can be multiplied by itself to produce a given number (e.g., the square root of 144
is 12 or $\sqrt{144}=12$ ).
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |



| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Standard units accepted measuring devices and units of the customary of measure or metric system.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words | Somewhat Familiar <br> Use It All the <br> Time |
| Facts/Rules/Formulas |  |

Straight angle an angle whose measure is exactly $180^{\circ}$.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Supplementary angles two angles, the sum of which is exactly $180^{\circ}$.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Surface area of a the sum of the areas of the faces of the figure geometric solid that create the geometric solid.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Symbolic expression a symbol or set of symbols expressing a mathematical quantity or operation (e.g., $2 x$ is equal to two times $x$ ).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Symbolic expressions represented by symbols (e.g., circles M representations shaded to represent $\frac{1}{4}$ or variables used to represent of numbers quantities).

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Symmetry a term describing the result of a line drawn through E the center of a figure such that the two halves are congruent. Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

System of a group of two or more equations that share variables. The equations solution to a system of equations is an ordered number set that makes all of the equations true.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Table a data display.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/Formulas |  | Picture or Graph |

Tessellation a covering of a plane with congruent copies of the same pattern with no holes and no overlaps, like floor tiles.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Theoretical/expected the likelihood of an event happening based on probability theory rather than on experience and observation.

Mark on the line your knowledge of this word.

| Explain in your own words |  | Example |
| :---: | :---: | :---: |
| Facts/Rules/Formulas |  | Picture or Graph |

Transformation an operation on a geometric figure by which another image is created. Common transformations Include flips, slides, and turns.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Transitive property when the first element has a particular relationship to a second element that in turn has the same relationship to a third element, the first has this same relationship to the third element (e.g., if $a=b$ and $b=c$, then $a=c$ ). Identity and equality are transitive relationships.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Transversal a line that intersects two or more lines at different points.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

Tree diagram a diagram in which all the possible outcomes of a given event are displayed.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words | Somewhat Familiar |
| Esample It All the |  |
| Time |  |

Turn see Rotation.
E


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Unorganized data data that are presented in a random manner.

| Mark on the line your knowledge of this word. |  |  |
| :---: | :---: | :---: |
|  | Somewhat Familiar | Use It All the Time |
| Explain in your own words |  | Example |
| Facts/Rules/F ormulas |  | P icture or Graph |

Variable any symbol that could represent a number.
Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Vertex the common endpoint from which two rays begin (e.g., the vertex of an angle) or the point where two lines intersect; the point on a triangle or pyramid opposite to and farthest from the base.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Vertical angles the opposite angles formed when two lines intersect.

| Explain in your own words |  |
| :--- | :--- |
| Never Heard |  |
| of |  |
| Facts/Rules/Formulas |  |

Volume the amount of space occupied in three dimensions and expressed in cubic units. Both capacity and volume are used to measure empty spaces; however, capacity usually refers to fluids, whereas volume usually refers to solids.

Mark on the line your knowledge of this word.

| $\substack{\text { Never Heard } \\ \text { of It }}$ |  |
| :---: | :---: |
| Explain in your own words |  |

Weight measures that represent the force that attracts an object E to the center of Earth.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

Whole numbers the numbers in the set $\{0,1,2,3,4, \ldots\}$.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas | Picture or Graph |
|  |  |

$x$-intercept the value of $x$ on a graph when $y$ is zero (0).
M
The $x$-axis is the horizontal number line on a rectangular coordinate system.

Mark on the line your knowledge of this word.

$y$-intercept the value of $y$ on a graph when $x$ is zero (0). The $y$-axis is the vertical number line on a rectangular coordinate system.

Mark on the line your knowledge of this word.


| Explain in your own words | Example |
| :---: | :---: |
|  |  |
| Facts/Rules/Formulas |  |
|  |  |
|  |  |

