

ALGEBRA 1 VOCABULARY

absolute value	The distance from 0 on a number line. Always positive.
algebraic expression	A group of numbers, symbols and variables that express an operation or a series of operations.
approximate	Almost exact or correct value.
arithmetic sequence	A sequence such as 1, 5, 9 or 12, 7, 2 which has a constant difference between terms.
average	The sum of given numbers divided by the number of numbers used in computing the sum.
axes	A reference line on a graph.
binomial	Polynomial with two terms which are not like terms.
bisect	To divide a line segment, an angle, or an arc into two congruent parts.
calculate	To perform a mathematical process.
cartesian coordinates	An ordered pair of numbers that locates a point in the coordinate plane.
coefficient	The number multiplied times a product of variables or powers of variables in a term.
completing the square	Method used to solve an equation when factoring is possible but not immediately obvious.
conic sections	The family of curves including circles, ellipses, parabolas, and hyperbolas.
consecutive	Immediately following each other in some order.
constant	A term or expression with no variables.
correlation, negative	Relationships between two sets of numerical data in which one increases and one decreases.
correlation, positive	Relationships between two sets of numerical data in which both variables increase.
cube (exponent)	A regular polyhedron for which all faces are squares.
cube root	A number that must be multiplied times itself three times to equal a given number.
cubed	Raised to the third power.
direct proportion	A relationship between two variables in which one is a constant multiple of the other. In particular, when one variable changes the other changes in proportion to the first.
direct variation	A relationship between two variables in which one is a constant multiple of the other. In particular, when one variable changes the other changes in proportion to the first.
distributive property	The product of a number and a sum is equal to the sum of the individual products of the addends and the number.
domain (function)	The set of values of the independent variable(s) for which a function or relation is defined.
ellipse	A conic section which is essentially a stretched circle.
equal to	Having the same quantity, measure, or value as another.
estimate	To calculate approximately.
expansion (binomial)	A quantity written in an extended form, such as in a sum or product of terms.
exponent	Tells how many times the base is used as a factor.
exponential equation	Any equation that has an exponent in one or more terms.

exponential function	A function of the form $y = a \cdot b^x$ where $a > 0$ and either $0 < b < 1$ or $b > 1$.
expression	A symbol or combination of symbols that represents a quantity or a relationship between quantities.
factoring	One of two or more quantities that divides a given quantity without a remainder.
factors	Factors are the numbers you multiply together to get another number with no remainder.
FOIL method	An application of the distributive property used to multiply two binomials. The product of the two binomials is found by the F irst, O uter, I nner, and L ast terms.
frequency	The number of times a specified periodic phenomenon occurs within a specified interval.
function	A relation for which each element of the X corresponds to exactly one element of the Y .
geometric sequence	A sequence such as 2, 6, 18, 54, 162 which has a constant ratio between terms.
graph	A pictorial representation of some mathematical relationship.
greater than	An inequality relation such as 7 is greater than 2.
hyperbola	Is one of the four kinds of conic section, formed by the intersection of a plane and a cone.
identity	An equation or inequality which is true regardless of what values are substituted for any variables
inequality	A mathematical sentence built from expressions using one or more of the symbols $<$, $>$, \leq , or \geq .
integer	All positive and negative whole numbers (including zero).
intercept	A point where a line crosses the X or Y axis.
interpret	To present in understandable terms.
intersection	The elements two or more sets have in common.
inverse proportion	A relationship between two variables in which the product is a constant. When one variable increases the other decreases in proportion so that the product is unchanged.
inverse variation	A relationship between two variables in which the product is a constant. When one variable increases the other decreases in proportion so that the product is unchanged.
irrational numbers	Numbers that cannot be written as a ratio of two integers.
less than	An inequality relation such as 2 is less than 7.
like terms	Terms which have the same variables and corresponding powers and/or roots.
line	The geometric figure formed by two points.
line of best fit	A straight line drawn through the center of a group of data points plotted on a scatter plot.
linear equations	Any line that has a constant slope.
mean	The average of a data set.
median	The midpoint of a data set.
mode	The most common piece of data in a date set.
monomial	A polynomial with one term.
negative correlation	A relationship between two variables in which one variable increases as the other decreases.
negative exponent	A way of indicating reciprocals.
nonlinear equation	Equation whose graph does not form a straight line.

nonnegative	Not negative. That is, greater than or equal to zero.
nonzero	Not equal to zero.
ordered pair	On the coordinate plane, the pair of numbers giving the location of a point.
origin	The point of intersection of the x - and y -axes. On a number line, the origin is the 0 point.
parabola	A conic section formed by the intersection of a cone by a plane parallel to its side.
percentile	A division of ordered data into 100 equal parts.
perfect square	Any number that is the square of a rational number.
point	An exact location in space.
point-slope form	The equation of a straight line in the form $y - y_1 = m(x - x_1)$, where m is the slope of the line and (x_1, y_1) are the coordinates of a given point on the line in a cartesian coordinate system.
polynomial	The sum or difference of terms/monomials.
precision	The level of detail in a number or estimate.
probability	The likelihood of the occurrence of an event.
proportion	An equation showing the two ratios are equal.
quadrant	The four sections into which the x - y plane is divided by the x - and y -axes.
quadratic equation	An equation includes only second degree polynomials.
quadratic formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
quadratic function	A function with no higher than a second degree variable.
quotient	The result of dividing two numbers or expressions.
radical sign	The $\sqrt{\quad}$ symbol, which is used to indicate square roots or n th roots.
range (function)	The set of y -values of a function or relation.
rate of change	The speed at which a variable changes over a specific period of time.
ratio	The result of dividing one number or expression by another.
rational number	All positive and negative fractions, including integers and so-called improper fractions.
real number	All numbers on the number line.
reciprocal	The reciprocal of x is $\frac{1}{x}$.
region (coordinate plane)	A large, usually continuous segment of a surface or space.
rise	A change in a Y value between two points in the graph of a line.
root (function)	Inverse of a power.
run	A change in a X value between two points in the graph of a line.
scientific notation	A standardized way of writing real numbers. In scientific notation, all real numbers are written in the form $a \cdot 10^n$
sequence	A list of numbers arranged in a pattern such as 1, 3, 5, 7, . . .

slope	The measure of steepness of a line as you look at it from left to right.
slope-intercept form	$y = mx + b$
solution set	Any and all value(s) of the variable(s) that satisfies an equation, inequality, system of equations, or system of inequalities.
square (exponent)	A product of a number and itself.
square root	A nonnegative number that must be multiplied times itself to equal a given number.
substitution	Replacing one symbol by a number.
system of equations	Two or more equations containing common variable(s).
system of inequalities	Two or more inequalities containing common variable(s).
table	Way of organizing and displaying data.
term (sequence, series)	Parts of an expression or series separated by + or – signs, or the parts of a sequence separated by commas.
trend	A general pattern in a set of data.
trinomial	A polynomial with three terms which are not like terms.
value	The quantity that is the result of applying one or more operations.
variable	A quantity that can change or that may take on different values.
variable, dependent	A variable that depends on one or more other variables. The dependent variable is y .
variable, independent	A variable in an equation that may have its value freely chosen without considering values of any other variable. The independent variable is x .
vertical line test	A test used to determine if a relation is a function.
x-axis	On a coordinate grid, the horizontal axis.
x-intercept	A point at which a line intersects the x -axis.
y-axis	On a coordinate grid, the vertical axis.
y-intercept	A point at which a line intersects the y -axis.
zero exponent	Anything to the zero power = 1
zero slope	The slope of a horizontal line.