| Name: | Period: |
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Vocabulary Words and Definitions for Algebra

| Word/Phrase | Definition | I know what it means | I think I know what it means | I don't know what it means |
|-----------------------|---|-------------------------|---------------------------------|-------------------------------|
| Absolute Value | The distance between zero and the point representing a real number on the number line | | | |
| Additive Inverse | The opposite of a number | | | |
| Algebraic Expression | An expression that contains at least one variable | | | |
| Ascending Order | Putting terms in order "going up" based on the exponents | | | |
| Associative Property | For any numbers a, b, and c: $(a + b) + c = a + (b + c)$ and $(ab)c = a(bc)$ | | | |
| Axis of Symmetry | The line that divides a graph into two symmetrical parts that are mirror images or each other | | | |
| Base | The repeated factor of a number written in exponential form | | | |
| Binomial | A polynomial consisting of two terms | | | |
| Coefficient | This is the number in front of the variables in a term | | | |
| Combine Like Terms | Add or subtract terms that have the same variable and exponent | | | |
| Commutative Property | For any numbers a, b and c: a + b + c = a + c+ b and abc = cba | | | |
| Completing the Square | The process of rewriting a quadratic equation so that one side is a perfect square trinomial | | | |
| Compound Inequality | Two inequalities that are combined into one statement by the word <i>and</i> or <i>or</i> | | | |
| Consistent System | A system of equations that has at least one solution | | | |
| Constant | A term with no variables | | | |
| Converse | Opposite | | | |
| Coordinate Plane | Formed by two number lines that intersect at their zero points | | | |
| Coordinates | Ordered pairs that identify points on a plane | | | |
| Deductive Reasoning | The process of using logic to draw conclusions | | | |
| Denominator | The lower half of a fraction | | | |
| Dependent System | A system of equations that has infinitely many solutions | | | |
| Descending Order | Putting terms in order "going down" based on the exponents | | | |

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| Difference | The answer to a subtraction problem | | | |
| Difference of Two Squares | A binomial whose terms are squares and have a minus sign between them | | | |
| Direct Variation | A linear relationship between two variables where there is a non-zero number k; y = kx | | | |
| Discriminant | The expression inside the radical of the quadratic formula | | | |
| Distributive Property | For any real numbers a, b, and c, $a(b + c) = ab + ac$ | | | |
| Domain | The set of all first coordinates (x-values) of a relation or function | | | |
| Elimination Method | Used to solve systems in which one variable is eliminated by adding or subtracting two equations in the system | | | |
| Equation | A mathematical sentence with an equal sign | | | |
| Equivalent Expressions | Expressions that are equal to each other | | | |
| Equivalent Inequalities | Inequalities that have the same solution set | | | |
| Evaluate | Replace each variable with a number and follow the order of operations | | | |
| Expand | Means to multiply | | | |
| Exponent | The number of times the base is used as a factor | | | |
| Extraneous Solution | An answer that does not satisfy the original equation | | | |
| Factor | An integer that divides another integer with no remainder | | | |
| Factored Form | Rewriting a polynomial as the product of two or more factors | | | |
| Factorization | A representation of an expression as a product of two or more expressions | | | |
| Fractional Exponent | An exponent that can be written as m/n where n≠0 | | | |
| Function | A relation in which every domain value is paired with exactly one range value | | | |
| Function Notation | If x is the independent variable and y is the dependent variable, then for y is $f(x)$, read "f of x", where f names the function | | | |
| Graph | Drawing a line to represent the solutions to an equation or inequality | | | |
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| Greatest Common Factor | The largest number that divides into two terms | | | |
| Grouping Symbols | Symbols such as parentheses (), brackets [], and braces {} that separate a part of an expression. A fraction bar, absolute value symbols and radical symbols may also be used as grouping symbols | | | |
| Inconsistent System | A system of equations that has no solution | | | |
| Independent System | A system of equations that has exactly one solution | | | |
| Inequality | A sentence that uses one of the following symbols: $<,>,\leq,\geq$ | | | |
| Infinite Solutions | When the answer to a system of equations is exactly the same | | | |
| Integer | The set of whole numbers and their opposites | | | |
| Intersection | The set of all elements that are common to both sets, denoted by a ∩ | | | |
| Inverse Operations | Two operations that undo each other, such as addition and subtraction | | | |
| Inverse Variation | A non-linear relationship between two variables where there is a non-zero number k; y = k/x | | | |
| Irrational Number | A number that can be represented by a non-repeating, non-terminating decimal | | | |
| Isolate the Variable | Collecting like terms and/or using inverse operations to get the variable by itself on one side of the equation | | | |
| Least Common Denominator | The smallest denominator that two or more numbers have in common | | | |
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| Like Terms | Terms with the same variables raised to the same exponent | | | |
| Linear Equation | An equation written with one or more variables where the exponent of the variable is one | | | |
| Linear Inequality | An inequality written with one or more variables where the exponent of the variable is one | | | |
| Monomial | A polynomial consisting of one term | | | |
| Multiple | The products of this number and any non-zero number | | | |

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| Multiplicative Identity Property | Any number multiplied by one is that number | | | |
| Multiplicative Inverse | The reciprocal of a number | | | |
| Multiplicative Property of Zero | Any number multiplied by zero is zero | | | |
| Natural Number | The set of counting numbers | | | |
| No Solution | When there is no answer to a system of equations or inequalities | | | |
| Numerator | The upper half of a fraction | | | |
| Numerical Expression | An expression that represents a particular number | | | |
| Opposites | Numbers that have the same distance from 0 on a number line | | | |
| Order of Operations | The rules for evaluating an expression involving more than one operation | | | |
| Ordered Pair | A pair of numbers (x, y) used to identify a point in a coordinate plane | | | |
| Origin | The intersection of the x axis and y axis on the coordinate plane | | | |
| Parabola | An up-turned or down-turned U-shaped graph | | | |
| Parallel | Lines or planes that never intersect | | | |
| Perfect Square | The square of an integer | | | |
| Perfect Square Trinomial or Trinomial Square | Can be factored as the square of a binomial | | | |
| Perpendicular | Lines or planes that intersect to form right angles | | | |
| Point-Slope Equation | A non-vertical line that contains a point $(x1, y1)$ and has a slope of m and is found in the format of $y - y1 = m(x - x1)$ | | | |
| Polynomial | A monomial or sum of monomials | | | |
| Power | An expression written with a base and an exponent | | | |
| Prime Factorization | A representation of a number or a polynomial as a product of primes | | | |
| Prime Number | A whole number greater than or equal to 2 that has exactly two positive factors, 1 and itself | | | |
| Product | The answer to a multiplication problem | | | |
| Properties of Equality | Rules that transform an equation into an equivalent equation | | | |
| Property | A law that is followed in mathematics | | | |

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| Quadrant | One of the four regions into which coordinate axes divides a plane | | | |
| Quadratic Expression | A collection of terms that has one term that contains a variable to the second power | | | |
| Quadratic Formula | Used to find solutions to an equation that has a term with a variable to the second power | | | |
| Quotient | The answer to a division problem | | | |
| Rate | A ratio that compares two quantities measured in different units | | | |
| Ratio | The relationship a/b of two quantities, a and b | | | |
| Rational Expression | A fraction whose numerator and denominator are non-zero polynomials | | | |
| Rational Number | Any number that you can write as a quotient of two integers a/b where b is not 0 | | | |
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| Real Number | The set of numbers that include all rational and irrational numbers | | | |
| Reciprocal | For a real number, a≠0, this is 1/a | | | |
| Repeating Decimal | A rational number that has a block of one or more digits (that are not all zero) after the decimal point that continually show up | | | |
| Replacement Set | A set of numbers that can be substituted for a variable | | | |
| Rise | The difference in the y-values of two points on a line | | | |
| Run | The difference in the x-values of two points on a line | | | |
| Simplest Form | Is where the only common factor of a numerator and denominator is 1 | | | |
| Simplest Form | Is where the only common factor of a numerator and denominator is 1 | | | |
| Simplified Expression | To replace with an equivalent expression having as few terms as possible | | | |
| Simplify | Put expressions into their most reduced form | | | |
| Slope | A measure of steepness of a line, represented by m | | | |
| Slope-Intercept Form | A line with slope m and y-intercept b has an equation y=mx+b | | | |
| Solution | A value that makes the equation true | | | |

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| Solution of a Liner Inequality | Answers that make an inequality true | | | |
| Solve | To find a solution to an equation or inequality | | | |
| Standard Form of an Equation | AX + BY = C where A, B and C are constants, there are no fractions and A must be positive | | | |
| Standard Form of Polynomials | When the terms of a polynomial are in order from greatest to least based on the value of the exponent | | | |
| Substitution Method | A method used to solve systems by solving an equation for one variable and replacing the resulting expression into the other equation | | | |
| Sum | The answer to an addition problem | | | |
| System of Equations | A set of two of more linear equations that contain 2 or more variables | | | |
| Terminating Decimal | A rational number that has a finite number of digits after the decimal point | | | |
| Terms of an Expression | The parts that are added or subtracted from an expression | | | |
| Trinomial | A polynomial consisting of three terms | | | |
| Undefined | When there is no solution to the problem | | | |
| Union | The set of all elements, denoted by a U | | | |
| Variable | A letter that represents one or more numbers | | | |
| Variable Expression | A symbolic form made up of constants, variables and operations | | | |
| Whole Number | A number system that includes the Natural Numbers and Zero | | | |
| X-Axis | The horizontal number line of a coordinate plane | | | |
| X-Intercept | The point where a graph intersects the x-axis | | | |
| Y-Axis | The vertical number line of a coordinate plane | | | |
| Y-Intercept | The point where a graph intersects the y-axis | | | |