

<u>Week</u>	<u>Term</u>	<u>Definition</u>
1	Proposition	A topic presented for consideration.
1	Exponent	A number that represents repeated multiplication of the same factor.
2	PEMDAS	Parenthesis, exponents, multiplication and division moving left to right, and addition and subtraction moving left to right.
2	Function	A function consists of: 1) a set called the domain containing numbers called inputs, and a set called the range containing numbers called outputs; 2) a pairing of inputs with outputs such that each input is paired with exactly one output.
3	Independent Variable	The input variable of a function; the set of which is known as the domain.
3	Dependent Variable	The output variable of a function; the set of which is known as the range.
4	Theorem	A statement that has been proven on the basis of previously established statements.
4	Postulate	A proposition that requires no proof, being self-evident; an axiom.
5	Square Root of X	A number that when multiplied by itself is X.
5	Archimedes	A greek mathematician, inventor, and astronomer living about 250 BC who worked out the value of pi and discovered parts of calculus.
6	Distance Formula	$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
6	Integers	...-3,-2,-1,0,1,2,3...
7	Bisect	To divide into two equal parts.
7	Deduction	Reasoning from one or more general statements to a logically certain conclusion.
8	Induction	An inference from particular cases to a general case.
8	Rational numbers	A number that can be written as a over b where a and b are integers and b is not equal to zero.
9	Rene DesCartes	A French mathematician living in the 17th century who discovered Cartesian coordinate system and therefore analytic geometry.
9	Absolute Value	The distance between any number and 0 on a number line (the number is always a positive number).
10	Constant Term	A term with a number part but no variable part.
10	Complementary Angles	Two angles whose sum equals 90 degrees.
11	Supplementary Angles	Two angles whose sum equals 180 degrees.
11	Like Terms	Terms containing the same variable part.
12	Coefficient	The number part of a term containing a number and a variable.
12	Congruent	Objects with the same shape and size.
13	Regular Polygon	A polygon that is equiangular and equilateral.
13	Perfect Square	A number that is a square of an integer.
14	Reciprocal of X	The number that when multiplied by X=1, inverse fraction.
14	Euclid	A Greek mathematician living about 300 BC who is known as "the father of Geometry" and who wrote <i>The Elements</i> .
15	QED	Quod erat demonstrandum - or "which was to be demonstrated" - or "I did it, how you like me now?"
15	Irrational Number	A number that cannot be written as the quotient of two integers.
16	Real Numbers	The set of all rational and irrational numbers.
16	Inverse Operations	Two operations that undo each other.

17	Ratio	A comparison of two numbers using division.
17	Chord	A line segment whose endpoints lie on the circumference of a circle.
18	Polyhedron	A 3-dimensional solid with flat faces and straight edges.
18	Proportion	An equation that states two ratios are equivalent.
19	Slope	The ratio of the vertical change to the horizontal change between any two points on the line.
19	Slope-Intercept Formula	$y = mx + b$
20	Isaac Newton	An English physicist, mathematician, and astronomer who wrote Principia Mathematica. He described gravity, identified the three laws of motion, and laid the foundation for much of modern-day physics.
20	Function Notation	A way to name a function using the symbol $f(x)$ instead of y .
21	Similar	Same shape but maybe not same size.
21	SOHCAHTOA	Sine = Opposite over Hypotenuse; Cosine = Adjacent over Hypotenuse; Tangent = Opposite over Adjacent.
22	Zero Exponent	If a is not equal to 0, then $a^0 = 1$.
22	Negative Exponent	If a is not equal to 0, then a^{-n} is the reciprocal of a^n .
23	Pythagoras	A greek philosopher and mathematician living about 500 BC for whom the pythagorean theorem is named (but he didn't discover it).
23	Degree of a Polynomial	The greatest degree of the terms of the polynomial.
24	Roots	The solutions of an equation in which one side of the equation is = 0 and the other side is a product of polynomial factors.
24	Factor Completely	A polynomial written as a product of unfactorable polynomials with integer coefficients.
25	Leonard Euler	An 18th century Swiss mathematician, he gave the world modern trigonometry and either introduced or popularized e , i , and π .
25	Circle	The set of all points equidistant from a particular point.
26	Ellipse	The conic section that resembles an oval but is not one.
26	Parabola	The U-shaped graph of a quadratic function.
27	Hyperbola	The planar graph of a quadratic equation which has two symmetrical branches.
27	Quadratic Formula	The formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
28	Hypotenuse	The side of a right triangle opposite the right angle.
28	Muhammed al-Khowarizmi	A Persian living in the seventh and eighth centuries, he wrote a book which demonstrated algebra and geometry titled Al-Jabr (where we get the word Algebra).
29	Pythagorean Theorem	For a right triangle, leg squared plus leg squared equals hypotenuse squared.