

SUPER MATH GLOSSARY

1. **Addition**- The mathematical operation used to find a sum. The problem $0.2+1.3=1.5$ is an example.
2. **Area**- A measurement of the amount of a surface on a flat figure. A tabletop that is 6 feet long and 2.5 feet wide has an area of $6 \times 2.5=15$ square feet.
3. **Average**- The sum of the data in a list divided by the number of its items in that list; the mean of the list.
4. **Angle**- A figure formed by two rays having a common endpoint.
5. **Acute angle**- An angle whose measure is between 0-90.
6. **Acute Triangle**- A triangle that contains three acute angles.
7. **Axis**- Horizontal and vertical scales on a graph or coordinate plane, referred to as the x –and y-axis.
8. **Add/addition**- Numerical operation used to combine quantities; find a total sum.
9. **Adjacent angles**- Angles that have a common vertex and a common ray.
10. **Algebraic expression**- A mathematical expression that contains one or more variables; a group of numbers, variables, and operation sign.
11. **Alternate exterior angles**- A pair of congruent angles formed by two parallel lines cut by a transversal, located, outside the parallel lines and on opposite sides of the transversal.
12. **Alternate interior angles**- A pair of congruent angles formed by two parallel cut by a transversal, located inside the parallel lines and on opposite sides of the transversal.
13. **Assumption**- A statement that is taken to be true until it is proved false.
14. **Approximate**- Another word for estimate. As an adjective: close or almost exact. The symbol=means “is approximately equals to”
15. **Associative [grouping] Property**- A mathematical rule stating that when more than two numbers are added or multiplied, the result will be the same no matter how the numbers are grouped: $(a+b)+c=a+(b+c)$; $(a \times b) \times c=a \times (b \times c)$ subtraction and division do not have this property.
16. **Absolute value of the number**- The non-negative distance between a number and zero. The symbol for the absolute value of a number is a pair of vertical bars; (number)
17. **Altitude of a parallelogram**- A perpendicular segment between two parallel sides.
18. **Altitude of a pyramid**- The perpendicular segment joining the vertex of the pyramid to the plane of its base.
19. **Altitude of a triangle**- A perpendicular segment between a vertex and the opposite side or the extension of the opposite side.
20. **Bar Graph**- Visual presentation of data from different sources as the height or length of bars against the same scale.

21. **Base**- The whole amount in a percent problem; in geometry, the side (face) on which a figure sits.
22. **Bisect**- To divide into two equal parts.
23. **Canceling**- The process of reducing to multiply and dividing out common factors from the numerator and denominator of a fraction before multiplying or dividing.
24. **Carrying**- To regroup from a lesser place value (e.g, ten ones to one ten) in order to add.
25. **Chart**- Visual organization and presentation of data in rows and columns.
26. **Circle**- A flat figure for which every point is the same distance around a circle.
27. **Certain event**- An event whose probability is 1.
28. **Circumference**- A measure of the distance around a circle; the perimeter of a circle.
29. **Circle graph**- Visual presentation of a data showing parts of a whole (the circle) using percents, decimals, or fractions.
30. **Coefficient**- One or more factors in a product.
31. **Common denominator**- A number that two or more denominators will divide into evenly; any common multiple of the denominators of two or more fractions.
32. **Common factors**- Factors common to two or more numbers or terms in an expression.
33. **Common multiple**- A number that contains two or more given numbers as factors.
34. **Commutative (order) property**- A mathematical rule stating that the order in which numbers are added (or multiplied) does not change the sum (or product): $a+b=b+a$; $a \times b= b \times a$.
35. **Comparing**- Determining which number is greater; arranging numbers in order; using equality and inequality symbols ($=, >, <, .$).
36. **Compatible numbers**- Numbers that are easy to work with in problem solving; numbers that form a basic division fact.
37. **Complementary angles**- Two angles for which the sum of their measures is 90 degrees.
38. **Cone**- A solid (3-dimensional) figure with a circular base and sides that meet at a point.
39. **Congruent angles**- Angles that have equal measures.
40. **Congruent figures**- Figures that have the same shape and size.
41. **Congruent polygons**- Two or more polygons with the same number of sides whose corresponding sides and angles are congruent.
42. **Consecutive numbers**- Numbers in counting order.
43. **Conversion factor**- Equivalency to change from one unit of measurement to another (e.g., $1\text{hr}=60\text{ min}$).

44. **Coordinate graph**- A set of points formed by a grid with a horizontal (x-) and a vertical (y-) Axis: sometimes called a coordinate plane or grid.
45. **Corresponding angles**- Angles that are in the same position in relation to a transversal that cuts across two parallel lines; the angles are either both above or both below the two parallel lines and on the same side of the transversal; always equal in measure.
46. **Cross product**- In a pair of equivalent fractions, the product of the numerator of one fraction and the denominator of the other fraction; the products of cross multiplying; when two fractions are equal; the cross products are equal.
47. **Counting number** - Any number in the set (1.2.3.....)
48. **Cube**- A 6 sided, 3-dimensional figure whose faces are congruent squares.
49. **Cube of a number**-Third power of a number.
50. **Cube root**- A number whose cube is the given number. For example, 4 is the cube root of 64 because $4^3=64$.
51. **Cubic Units**-units in the shape of a cube with the length of each side equal to the linear unit (e.g., a cubic inch) used to measure the volume of a three-dimensional figure.
52. **Customary (U.S.) system of measurement**- The measurement system commonly used in the United States; some examples of standard units are feet, miles, pounds, and ounces.
53. **Cylinder**- A solid (3-dimensional) figure with two congruent circular bases and straight sides.
54. **Data**- A collection of numbers and information.
55. **Decimal**- A fraction expressed in the place value system to the right of the decimal point. Also, a fraction in which the whole is divided into tenths, hundredths, thousandths, ten-thousandths, and so on. The decimal $0.7=7/10$.
56. **Decimal place**- The position of a digit to the right of the decimal point. In the number 2.358, the digit 5 is in the hundredths place.
57. **Decimal Point**- A dot that separates whole numbers from decimal fractions. In the number 14.6, the point separates the whole number 14 from the decimal fraction $6/10$.
58. **Degree**- A unit of angle measure.
59. **Denominator**- The bottom number in a fraction that tells the number of equal parts in the whole object or group. In the fraction $\frac{3}{4}$ the denominator is 4.
60. **Dependent**- In probability, an event whose outcome (occurring later) is affected by the outcome of an earlier event.
61. **Diagonal**- A line segment drawn between the vertices of two non-adjacent sides of a figure that has four or more straight sides.
62. **Diameter**- A line segment drawn through the center of a circle connecting two points on the circle; twice the length of the radius, e.g. the distance across the circle.
63. **Difference**-The answer to a subtraction problem. For the problem $2.9-0.5$, the difference is 2.4.

64. **Digit**- One of the ten number symbols. The digits are 1,2,3,4,5,6,7,8,9, and 0. They are used to represent numbers in a place value system.
65. **Distance**- The non-negative length between two given points.
66. **Distributive property**- A mathematical rule stating that the product (or quotient) of a number and a sum (or difference) is equal to the sum (or difference) of the products (or quotients) of the number and the individual terms within the parentheses.
67. **Dividend**- The number in a division problem into which another number divides. In 6.8 divided by $2 = 3.4$, the dividend is 6.8 ., also, the numerator of the fraction.
68. **Division**- A mathematical operation that requires figuring out how many times one amount is contained in another. In the problem $\frac{3}{4}$ divided by $\frac{1}{8} = 6$, the answer means that there are six one-eighths in a $\frac{3}{4}$.
69. **Divisor**- The number in a division problem that divides into another; the denominator of the fraction. In 4.5 divided by $0.5 = 9$, the divisor is 0.5 .
70. **Equation**- a mathematical statement that says two expressions are equal.
71. **Equilateral triangle**- A triangle with three congruent sides; an equilateral triangle also has three congruent angles, each measuring 60° .
72. **Equiangular triangle**- A triangle with three congruent angles.
73. **Equivalent fractions**- Two or more fractions that have the same value.
74. **Equivalent ratios**-Two or more equal ratios.
75. **Estimate**- As a noun: an approximate value. As a verb: to find an approximate value. Also; to find an approximate solution when an exact answer is not needed.
76. **Evaluate**- To find the value of an expression when the values of the variables are known.
77. **Evaluate an expression**- Substitute known or given values for the variables into an algebraic expression and perform the operations (in the order of operations) to obtain the solution.
78. **Experimental probability**- Chance of a specific outcome determined by performing a number of trials; the ratio of the number of favorable outcomes obtained to total number of trials.
79. **Exponent**- a raised number at the right of another number that tells how many times the number is to be used as a factor. Also, to find the value of an expression when the values of the variables are known.
80. **Expression**- A mathematical term or phrase.
81. **Extremes**- The first and fourth terms in the proportion $a : b = c : d$; a and d are the extremes.
82. **Face**- One flat 2-dimensional surface (face) of a solid figure.
83. **Factor**- In multiplication, the terms that are multiplied. (e.g., 3 and 4 are factors of 12; 2 and x are factors of x).
84. **Fixed Placed accuracy**-in a division problem, rounding an answer to a certain place. The division problem 2 divided by 0.3 never comes out even. To the nearest hundredth, the answer is 6.67 .

85. **FOIL method**- A system for multiplying algebraic factors with more than one term; FOIL stands for First-Outer-Inner-Last.
86. **Formula**- an equation showing a mathematical relationship in which the letters stand for specific kinds of qualities. Also, a mathematical rule written with an = sign. The formula for finding interest is $i = prt$, where i is the interest, p is the principal, r is the rate, and t is the time.
87. **Factoring an expression**- finding the algebraic terms or expressions (called factors) that when multiplied will result in certain product.
88. **Fraction**- A part of the whole. The fraction $\frac{1}{4}$ tells what part quarter is of a dollar. A fraction can also be thought of as a division problem. The fraction $\frac{6}{2}$ means six divided by two. Digits grouped above and below a division bar; a ratio.
89. **Frequency**- for set of a data, the number of items in a given category.
90. **Frequency table**- a chart used to summarize data that shows the number of times certain events occurs.
91. **Front-end rounding**- rounding the left-most digit of each number in a problem in order to calculate an estimate. In the problem 52×0.79 , the number 52 rounds to 50 and 0.79 round to 0.8. The estimate is $50 \times 0.8 = 40$.
92. **Frustum**- A part of a cone or pyramid between two parallel planes.
93. **Function**- An algebraic rule involving two variables in which for every value of the first variable (x) there is a unique value of the second variable (y)
94. **Graph**- Visual representation comparing data from different sources or over time.
95. **Greatest common factor (GCF)**- The greatest number that is a common factor of two or more numbers.
96. **Grouped frequency**- The number of times the members of a data set occur in a sample.
97. **Grouping symbols**- Parentheses, brackets, braces, or fraction bars used to group together terms of an expression.
98. **Height**- The straight-line measurement from the base of an object to the top. The measurements of a rectangular container include the length, the width, and the height.
99. **Hexagon**- A polygon with six sides.
100. **Higher Terms**- The opposite of the reduced form of a fraction. The fraction $\frac{3}{4}$ raised to twelfths is $\frac{9}{12}$.
101. **Histogram**- A type of bar graph that represents intervals rather than individual values in a data set. The width of the bar represents the interval; the height of the bar represents the number of items in the interval.
102. **Horizontal Axis**- Scale that runs along the bottom or left to right on a graph or coordinate grid; the x-axis.
103. **Hypotenuse**- In a right triangle, the side opposite the right angle; the longest side in a right triangle.

104. **Impossible event**- An event with the probability of 0.
105. **Improper fraction**- A fraction that shows a quantity equal or greater than 1; a fraction in which the numerator is equal to or greater than the denominator.
106. **Independent**- In probability, an event whose outcome (occurring later) is not affected by the outcome of an earlier event.
107. **Indirect Measurement**- A method used to find measures when there is no actual way to perform the measurement.
108. **Inequality**- A mathematical sentence that uses one of the following sentences: $>$, $<$, \neq , \geq , \leq .
109. **Integers**- All whole numbers, positive and negative, and 0
110. **Interest**- Money paid or earned on an amount loaned or invested.
111. **Intervals**- Equal segments on a number line; a set of numbers between two given numbers.
112. **Inverse**- Opposite: addition and subtraction are inverse operations as are multiplication and division.
113. **Irrational Number**- A number that cannot be written as the quotient of two integers; a non-repeating, non-terminating decimal.
114. **Irregular Figure**- A figure made of several common shapes.
115. **Isolate the Variable**- Perform operations to get the variable alone on one side of an equation.
116. **Isosceles Triangle**- A triangle with two equal sides.
117. **Key**- The part of a graph that indicates how to interpret symbols or colors.
118. **Kilo**- A prefix meaning 1,000.
119. **Kilogram**- The standard unit of weight in the metric system. A kilogram is a little more than two pounds.
120. **Label**- A word or abbreviation used to identify the unit of measurement of some quantity. An envelope has a weight of ounces. The label is ounces.
121. **Least Common Denominator (LCD)**- The smallest common multiple of the denominators of two or more fractions.
122. **Least Common Multiple (LCM)**- The smallest number that contains two or more numbers as factors.
123. **Leg**- In a right triangle, one of the two sides that form the right triangle.
124. **Like Fractions**- Fractions that have the same denominator.
125. **Like Terms**- In algebra, terms that have the same variables and exponents.
126. **Linear Equation**- An equation that does not contain a variable to any power (exponent) greater than 1; an equation whose graph is a straight line.

127. **Line**- A set of points in a plane that extends indefinitely in both directions.
128. **Line Graph**- Visual presentation of data as a line on a grid; often showing change over time (a trend); one or more segments that connect a set of points on a coordinate plane.
129. **Line Segment**- The set of points on a line determined by two points and all the points between them. The two points are called the endpoints of the segment.
130. **Liter**- The standard unit of liquid measure in the metric system. A liter is about the same of one quart.
131. **Lowest Common Denominator**- The lowest number into which every denominator in a problem can divide evenly. For the problem $\frac{5}{6} + \frac{3}{4}$, the lowest common denominator is 12.
132. **Lowest Terms**- A fraction in which the numerator and the denominator contain no common factors other than 1.
133. **Mean**- Another word for average. A sum divided by the number of items that make up the sum.
134. **Means**- In the proportion $a : b = c : d$, b and c are the means; the second and third terms in the proportion.
135. **Measures of Central Tendency**- Measurements used to describe sets of data. They represent a central or middle value. The three measures of central tendency are mean, median, and mode.
136. **Median**- The middle number of a set of numbers arranged in order.
137. **Mega**- A prefix meaning 1,000,000.
138. **Meter**- The standard unit of length in the metric system. A meter is a little more than one yard.
139. **Metric system**- A standard of measure based on tens, hundreds, and thousands. The standard unit of weight is a kilogram. The standard unit of liquid measure is the liter.
140. **Micro**- A prefix meaning $\frac{1}{1,000,000}$.
141. **Milli**- A prefix meaning $\frac{1}{1,000}$.
142. **Mixed Decimal**- A number with both a whole number and a decimal fraction. In the mixed decimal 4.3, the whole number is 4 and the decimal fraction is 3 tenths.
143. **Mixed Number**- A number made up of a whole number and a fractional part; a quantity expressed as a whole number and a proper fraction.
144. **Mode**- The number or numbers that occur most often in a data set.
145. **Multiple**- The result of multiplying a given number by the counting numbers.
146. **Multiply/Multiplication**- Numerical operation used to combine the same quantity many times; find a product.
147. **Multiplication Inverse**- A number or numbers that occur most often in a data set.
148. **Multiples of a number**- The product of that number and the natural numbers.

149. **Mutually exclusive events**- Two or more events such that the occurrence of one rules out the occurrence of the others. Tossing a coin, the face up values being heads or tails are mutually exclusive.
150. **Natural numbers**- Any number of the set $\{1, 2, 3, \dots\}$. Also called the “counting numbers.”
151. **Negative number**- A number to the left of zero on a number line; a number less than zero in value; used to show a decrease, a loss, or a downward direction; always preceded by a minus sign.
152. **Non-adjacent angles**- Angles that do not share a common ray; they may or may not share a common vertex.
153. **Non-repeating decimal**- A number whose decimal digits do not contain a repeatable pattern.
154. **Non-terminating decimal**- A number whose decimal digits do not end.
155. **Number line**- A line divided into equal segments (intervals) by points corresponding to integers, fractions, or decimals; points to the right of O are positive; those to the left are negative.
156. **Numerator**- The top number in a fraction; it tells the number of equal parts to which you are referring.
157. **Obtuse angle**- An angle whose measure is between 90° and 180° .
158. **Obtuse triangle**- A triangle with one obtuse angle (a triangle can only have one obtuse angle).
159. **Operation**- A rule that governs how two numbers can be combined. In arithmetic, the four basic operations are addition, subtraction, multiplication, and division.
160. **Order of operations**- A set of rules that determines the order of simplifying expressions when more than one operation is involved.
161. **PEMDAS**- Is the abbreviation used to describe the order of operations:
P- Parentheses (or any type of grouping symbol)
E- Exponents
M- Multiplication
D- Division
A- Addition
S- Subtraction
162. **Opposite angles**- The angles that are across from each other when two lines intersect or cross; in a geometric shape, opposite angles are directly across from each other.
163. **Ordered pair**- A pair of numbers that names a point on a coordinate graph; presented in parentheses as (the x-coordinate, the y-coordinate).
164. **Order of operations**- A sequence, agreed upon by mathematicians, for performing mathematical operations: 1. operations in grouping symbols, 2. Exponents and roots, 3. multiplication and division from left to right, 4. addition and subtraction from left to right.
165. **Origin**- The point at which the x-axis and y-axis in a coordinate graph intersect; the point represented by the ordered pair (0,0).

166. **Outcome**- The possible results in a probability experiment.
167. **Parallel**- Being an equal distance apart. The sides opposite each other in a rectangle are parallel.
168. **Parallel lines**-Two or more lines in the same plane that do not intersect.
169. **Parallelogram**- A four-sided polygon with both pairs of opposite sides parallel.
170. **Part**- A portion of the whole or base in a percent problem.
171. **Partial product**- When multiplying numbers with more than one digit, the result of multiplying the number on top by one of the digits in the bottom number.
172. **Pattern**- A list of numbers that is ordered according to a special rule or combination of rules.
173. **Pentagon**- A polygon with five sides.
174. **Percent**- A ratio that compares a number to 100.
175. **Percentile**- the score at or below which a given percent of all scores lie in a data set. That is, if a score is in the 45th percentile, then 45% of all scores in the data set are at or below that score.
176. **Perfect square**- The exact square of another number.
177. **Perimeter**- The distance around a flat (2-D) figure; the sum of the lengths of all sides of a flat figure.
178. **Period**- Each group of from 1 to 3 digits separated from other digits in and numbers by a comma.
179. **Perpendicular Lines**- Two lines that intersect, forming adjacent right angles.
180. **Pi**- The constant ratio of the circumference of a circle to diameter; approximately 3.14
181. **Pie Chart**- A circle graph used for comparing the parts of a whole to the whole. The area of the circle represents the whole, and the areas of the sectors of the circle represent the parts.
182. **Placeholder**- The digit 0 when used to fill a place value column.
183. **Place Value**- The number that each digit represents in a decimal.
184. **Plane**- A set of points that form a flat surface.
185. **Point**- A single, exact location often represented by a dot.
186. **Positive Number**- A number to the right of the zero on a number line; a number greater than zero in value; used to show an increase, a gain, or upward direction; may be preceded by a plus sign.
187. **Principal**- An amount of money loaned or invested on which interest is calculated.
188. **Prism**- A three-dimensional figure made up of segments that are parallel to a line intersecting two parallel planes. The bases of a prism are congruent polygons that lie in the parallel planes; its faces are parallelograms.

189. **Probability**- A number (whole, fraction, decimal, or ratio) that shows how likely it is that an event will happen; chance
190. **Product**- The result of multiplying two or more numbers.
191. **Proper fraction**- A fraction in which the numerator (the top number) is less than the denominator (the bottom number)
192. **Proportion**- An equation that states that two ratios (fractions) are equal.
193. **Pyramid**- A solid figure with a square base and four equal sides that meet at a point.
194. **Pythagorean Relationship**- In a right triangle, the square of the hypotenuse is equal to the sum of the squares of the other two sides (legs): $a^2 + b^2 = c^2$
195. **Quadrant**- One-fourth of a coordinate grid, formed by the intersecting axes.
196. **Quadratic equation**- An equation that contains a variable raised to the second power; there may be two solutions to a quadratic equation.
197. **Quadratic expression**- An algebraic expression containing a variable raised to the second power.
198. **Quadrilateral**- Any flat (plane) figure with four sides.
199. **Quotient**- The answer to a division problem; the amount in each part of the whole.
200. **Radical**- The sign indicating a root to be taken. To indicate a particular root of a quantity, a number, called the index is understood to be 2 without being written.
201. **Radicand**- The expression under a radical sign.
202. **Radius**- A line segment whose endpoints are the center of a circle and a point on the circle.
- 203.