The ABCs of Mathematics: Math Concepts from A to Z



There's a lot more to Math than just addition and subtraction and, as your child gets older, Math gets more complicated. In order to help support your child's mathematical learning, here's a quick look at Math concepts and terms from addend to zero.

Math Terms from A to Z

A is for *addend*. An addend is one of the numbers that will be added in an addition problem. In the problem 3 + 5 = 8, 3 and 5 are addends.

B is for *brackets*. Brackets are the [and] symbols. They are used to offset pieces of complicated equations so your child will go through the correct order of operations to solve the problem.

C is for *cardinal numbers.* Many people get <u>cardinal numbers and ordinal numbers</u> confused. Cardinal numbers are number words or numerals that are used for counting: (1, 2, 3 or one, two, three).

D is for *doubles facts*. Doubles facts are in important way for your child to learn addition and multiplication facts. A doubles fact is when a number is added to or multiplied by itself, such as 8 + 8 = 16 or $8 \times 8 = 64$.

E is for *equation.* An equation is a Math sentence that has at least one equal sign. Equations can be simple addition problems or complex algebraic sentences.

F is for *fact families.* Fact families are a set of numbers that are related to each other through a mathematical operation and the equations they can create together. For more detailed information, see: *Meet the Fact Family*.

G is for *geometry*. Geometry is a branch of Math that studies 2D shapes and 3D figures. As your child learns more complex math, geometry will play a bigger role in what he/she is learning.

H is for *hypotenuse*. The hypotenuse is the longest side of a right triangle, the side that is opposite the 90 degree angle.

I is for *improper fraction***.** An improper fraction is a fraction which has a larger numerator than denominator.

J is for *justifications***.** Although you may think of justifications as what your child gives you as an excuse when he's done something wrong, in math a justification is a statement that proves that a mathematical conclusion is correct. Justifications are mostly used in proving theorems in geometry.

K is for *key sequence.* A key sequence isn't nearly as exciting as it sounds. It's simply the directions of what to put into a calculator and in what order. The numbers and key symbols are drawn inside little rectangles.

L is for *least common denominator or multiple*. The <u>least common denominator</u> (LCD) and least common multiples (LCM) are related. The least common multiple is the smallest positive whole number into which two numbers can be divided evenly. The least common denominator is the smallest least common multiple that the bottom numbers (denominator) of two given fractions share.

M is for mean, mode and median. For some reason, these three concepts trip many kids up when it comes to Math. The mean is the average of a set of numbers. The mode is the number that shows up the most in a list of numbers. The median is the number in a set of numbers below which are exactly half of the rest of the numbers and above which are exactly half of the rest of the numbers. Basically, it's the middle of the list.

N is for *numerator*. The numerator is the top number of a fraction.

O is for *ordered pair*. An ordered pair is a set of graph coordinates expressed like (x,y). *X* is always the first number and *y* is always the second.

P is for *parallel*. You can have <u>parallel lines and parallel planes</u>, both of which have no points in common, meaning they never, ever meet.

Q is for *quotient*. The quotient is the answer to a division problem.

R is for *remainder*. A remainder is the amount left over in a division problem if the number can't be divided evenly.

S is for solving and solution. The solution to the problem is the answer that fills in the blank. In simple Math, it's the number after the equal sign. In more complicated Math, it's the value of the unknown variable(s). For instance, if your child is solving for x in the equation, 2x + 5 = 15, the solution is 5, or 5 is the value of x.

T is for *trapezoid.* A trapezoid is a quadrilateral which has a pair of opposite sides which are parallel. The parallel sides are called the bases and the other two sides are called the legs.

U is for *unknown*. When your child is working on a complex Math problem, sometimes the values of the variables are unknown.

V is for *variable*. A variable is the letter used to stand in for an unknown value. That's because the value can vary depending on the solution of the rest of the equation.

W is for whole numbers. Whole numbers are the <u>integers</u> (or numerals) that are not negative. For example: 0, 1, 2, 3, 4.....

X is for *x-axis*. The x-axis is the horizontal (going across) line of a number graph.

Y is for *y-axis.* The y-axis is the vertical (going up) line of a number graph.

Z is for zero. Zero (0) is a number with no value. It doesn't stand for any quantity and it's neither negative nor positive.