Words and definitions

additive (**ad**-uh-tiv) – relates to addition

algebra (**al**-juh-bruh) – the type of mathematics that uses letters as well as numbers in formulas, equations, etc. to solve problems. (Algebra comes from an Arabic word, al-jabr, that means "the putting together of broken parts". An algebra problem deals with a number of things that are "put together" in the solution.) (Barbara studied algebra in school.)

associative (ah-**soh**-see-uh-tiv) – related to the word associate (ah-**soh**-see-ayt), which means to join or come together as friends or companions; hang out with. (I associate with my friends and I don't associate with my enemies.) In math it means the way the numbers are grouped; which numbers associate with which others.
Example: $6 + (7 + 8)$ is the same as $(6 + 7) + 8$.

commutative (kuh-**myoot**-uh-tiv) – related to the word commute (kuh-**myoot**), which means to travel back and forth. (He commuted to work every day by train.) In math it means the order of numbers can be switched back and forth and it still means the same thing. Example: $7 + 3 = 3 + 7$ or $7 \times 3 = 3 \times 7$.

constant (**kon**-stuhnt) – a constant is a quantity that stays the same. (5 is a constant.) (-8 is a constant.)

distributive (diss-**trib**-yoo-tiv) – related to distribute (diss-**trib**-yoot) which means to divide among two or more. (I will distribute the cookies among the students.) In math the number in front of the parenthesis is distributed to each part inside the parenthesis. Example: $2(6 + 7)$ is the same as $2\times6 + 2\times7$.

equality (i-**kwol**-uh-tee) – keeping things equal. Equality is related to the words "equal" and "equation". The properties of equality apply to equations. (Mary studied the four properties of equality so she could solve equations.)

equation (i-**kway**-zhuhn) – a mathematical statement that two things are equal. It is shown using an equal sign. (James solved the equation $2x + 4 = 10$.) (The equation $y = 3 + 2$ was easy to solve.)

evaluate (i-**val**-yoo-ate) – to find the value of an expression by replacing variables with numbers. The values of the variables are given, and you replace them to find the answer. (Mark evaluated $4 \times q$ when $q = 3$ and got 12.) (He replaced a 7 for the y in the expression $y - 2$ to evaluate and get an answer of 5.)

exponent (**ek**-spoh-nuhnt) – the small number indicating how many times another number is multiplied by itself. 4^2 means 4×4.
In the expression 4^2 , the 2 is called the exponent.

expression (ek-**spresh**-uhn) – a mathematical statement that does **not** contain an equal sign. (The expression $4a + 4b + 8$ was the first problem on the test.) (He wrote the expression 2×10.)

expression (ek-**spresh**-uhn)

1. a mathematical statement that does not contain an equal sign.
($4 + 6 \times 2$ is an expression.)

2. the group of numbers and symbols above a fraction line or below it.
(In the fraction $\frac{2 + 3}{4 - 1}$ the $2 + 3$ and the $4 - 1$ are both expressions.)

formula (**for**-myuh-luh) – a special equation that always works for a certain type of problem. (I used the formula $A = l \times w$ to find the area of the table.)

identity (eye-**den**-ti-tee) – the fact of being the same; individuality. (He discovered the identity of the crook.) In math, the identity of the number stays the same if you multiply it by one or add zero to it.
Examples: $5 \times 1 = 5$ or $5 + 0 = 5$.

inverse (**in**-vurs) – opposite in the effect it has on something. (Wind blowing from the east is inverse to wind blowing from the west.) In math inverses sort of undo the previous operation. (You add three, then add –3 and you will be back where you started. Or you multiply by 3 and then multiply by 1/3 and you will be back where you started.)

multiplicative (muhl-tuh-**plik**-uh-tiv) – relates to multiplication

operation (op-uh-**ray**-shuhn) – an action performed on some set of quantities(numbers). Addition, multiplication, subtraction, division, raising to a power, etc. are operations. (He used the operations addition and multiplication to solve the problem.)

opposite (**op**-uh-zit) – being at the other end or other side. (We live on opposite sides of the street.) In math, opposites are the positive and the negative of the same number. Example: 5 and -5 are opposites. They are on opposite sides of the zero on a number line.

order (**or**-dur) - which comes first, second, third, etc. (The recipe said what order to stir-fry the vegetables.)

order of operations- which operation you do first, second, third, etc.

PEMDAS - Say this as a word to remember the order of operations.

plug in (**pluhg in**) – another word meaning substitute

property (**prop**-ur-tee) – a special quality or characteristic of a thing. (Sweetness in a property of sugar.)

reciprocal (ree-**sip**-rah-kl) – opposite, or an equal trade (I gave him a ride to work Monday, so he did a reciprocal favor for me and gave me a ride on Tuesday.) In math, the reciprocal has the opposite effect when you multiply it by a number. Example: 3 and 1/3 are reciprocals . Multiplying by 3 has the opposite effect of multiplying by 1/3.

replace (ri-**playss**) – another word meaning substitute

solve (**solv**) – solve usually means to find the answer to an equation. (The problem said to solve for b, and the student found that b = 7.) (Kristen solved the equation 3x = 18.)

substitute (**suhb**-stuh-toot) – to put something else in instead. In math, substitute means to put in a number instead of the variable in an expression. (I substituted an 8 for the d in the expression d + 2 .)

variable (**vair**-ee-uh-buhl) – a letter or other symbol that stands for different values. (x, y, a, α , and θ were all used as variables on the algebra worksheet.) (He used an x for the variable.) (α and θ are the Greek letters alpha and theta and can be used as variables.)