

Algebraic Expressions Definitions

Expressions: a combination of variables, numbers, or symbols that represent a mathematical relationship that has no equals sign (=)

$$3x + y - 7$$

Equations: a statement that two mathematical expressions are equal and has an equal sign (=) in it

$$2x + 7 = 15 - 7x$$

Term: is either a single number or variable, or the product of several numbers or variables, separated from another term by a + or - sign in an overall expression

Coefficient: the number in front of a variable

Constant: a number by itself

In the expression $3 + 4x + 5wyz$,
3, $4x$, and $5wyz$ are all **terms**
4 and 5 are the **coefficients**
3 is the **constant**

Common Words:	<u>Addition</u>	<u>Subtraction</u>	<u>Multiplication</u>	<u>Division</u>
	more	less	times	divided by
	sum	difference	product	quotient
	add	subtract	multiply	per
	increased	decreased	factor of	out of

Reminder: the word "**than**" means to switch the order, like "a number less than five" really means " $5 - n$ "

Order of Operations:

1. any calculations inside square brackets or parenthesis
2. all exponents, powers, square roots
3. all multiplications and divisions, working from left to right
4. all additions and subtractions, working from left to right

PEMDAS: "*Please Excuse My Dear Aunt Sally*"

- P** Parentheses or Brackets
- E** Exponents (ie Powers and Square Roots, etc.)
- MD** Multiplication and **D**ivision from left to right
- AS** Addition and **S**ubtraction from left to right