

Order of Operations and Solving Linear Equations

The Order of Operations:

One way to remember the order → “**P**lease **E**xclude **M**y **D**ear **A**unt **S**ally” (P.E.M.D.A.S.)

Parentheses (and other grouping symbols)—what are other grouping symbols?

Exponents

Multiplication & Division (left to right)

Addition & Subtraction (left to right)

Term vs. Factor:

Terms are parts of an expression separated by + or – signs

Factors are parts of an expression being multiplied or divided

Inverse Operations:

These are operations that “undo” each other. It is very important to know how to use these properly when solving equations!

- Addition & Subtraction
 - Multiplication & Division
 - Exponents & Radicals (Roots)
- } These are the two you will use when solving linear equations

Hints for Solving Equations:

- **Liberate the variable** (we’ll call her x)! To do this, you must undo whatever is being done to x by using the inverse operations.
- **Be fair!** Whatever you do to one side of the equation, do to the other side as well.
- **Share the wealth!** If you multiply (or divide) each side of the equation by a number, multiply (or divide) *each term* by that number.
- **There is strength in numbers!** If there is more than one x in the equation, get all the x ’s to one side.

For more help with your BCUSP 123 class, visit the **Quantitative Skills Center** in **UW2-134!**