**Master Math Mnemonics Manual**

“Your Handy Dandy Mathy Manual”

**What is the purpose of this manual?** This manual is to serve students who are taking math classes. The following math mnemonics can serve across multiple math disciplines including algebra, trigonometry, precalculus, quantitative reasoning, calculus, and even many upper-level math courses. Here are some of the most common math mnemonics that people think of in the field of mathematics:

1. FOIL (First, Outer, Inner, Last) = This math mnemonic can be used when solving distributive property in a math problem, and it can be seen across multiple math classes.
2. or Dad’s Silly Triangle )= This math mnemonic can be used when solving for distance or it can interchange to find speed, distance, or time. To find these two measurements, we use division. You might also see this formula being used in chemistry and physics classes.
3. SOHCAHTOA or Studying Our Homework Can Always Help To Obtain Achievement (Sine=Opposite/Hypotenuse, Cosine=Adjacent/Hypotenuse, Tangent=Opposite/Adjacent). This math mnemonic can be used to describe how to solve trigonometric functions, and you can reverse these to solve for secant, cosecant, and cotangent)
4. KHDBDCM or King Henry Died by Drinking Chocolate Milk (Kilo, Hecta, Deca, Base Units such as liter, grams, Deci, Centi, Milli). This math mnemonic can be used when solving conversions and using dimensional analysis. You may have seen this being used in chemistry and/or physics courses.
5. PE(MD)(AS) or Please Excuse My Dear Aunt Sally (Parenthesis, Exponents, Multiplication, Division, Addition, Subtraction). This math mnemonic can be used to help solve order of operation problems typically seen in math courses.
6. DMSBR Division (Divide, Multiply, Subtract, Bring Down, Remainder/Repeat). This math mnemonic is used when dividing by hand without a calculator, and this math mnemonic can be used in math classes as well in everyday life especially if there is no calculator around.
7. Greater Than or Less Than Alligator: This math mnemonic is used when comparing and contrasting the measurements of two things. We use this symbol (<) to signify less than, (>) to signify greater than, (=) to signify equal to or you can also have the following symbols to symbolize less/greater than or equal to: (≤ and ≥). These symbols are used in math courses as well as in everyday life.
8. CUBES Word Problem Strategy (Circle key numbers & units, Underline the question, Box math clue words, Evaluate & eliminate, and Solve and show your work). This word problem strategy can be used to solve any word problem that has math in it across multiple disciplines in math and science.
9. Dry Mix (Dependent, Responding, Y-axis - Manipulated, Independent, X-axis). This math mnemonic is used in describing the relationships of the coordinate plane relative to speed graphs and other types of graphs seen across multiple math and science disciplines.
10. Don’t Call Me After Midnight (Distribute, Combine Like Terms, Move the variable to one side of the equation, Undo any adding or subtracting, Undo any multiplication or division). This math mnemonic is used when trying to solve for equations in math classes and science classes especially classes like algebra and precalculus.
11. Types of Angles: Acute Angles (less than 90 degrees) are cute because they are small while obtuse angles (greater than 90 degrees) are big because they are not cute and small! This math mnemonic can be used in classes like trigonometry where angles are really important to remember.
12. SELFIE Test-Taking Method (Showed my work, Explained my answers, Lots of math vocabulary used, Found multiple solutions, I persevered through the problem, and I eliminated careless answers). This math mnemonic can be used as a motivator and step guide when trying to solve math problems on a math test which can be used in every math course.
13. Circle Math Mnemonics: Circumference or – Cherry Pie is Delicious and Area of a Circle or – Apple Pies are too!
14. LIATE: This trick helps in trying to decide what to choose as U in an integration by parts problem. The Integration by parts defined as this: . This math mnemonic is used in Calculus II classes.