

## MATH SYMBOLS FOR EMAIL

**This guide is intended to help with math expressions and syntax for communicating via email. (courtesy of Math Online Lab at Georgia Perimeter College;**

*(<http://www.gpc.edu/~lawmol/SymbolsEmail/MOLHelpWritingMathSymbols.htm>)*

OPERATION		EXAMPLES
Multiplication	There are several ways to show multiplication. To make sure it is clear use the * symbol (shift 8) to show numbers or variables that are multiplied together.	$5*x$ or $5x$ or $5(x)$ $x*y*z$ or $xyz$ $2*(x+4)$ or $2(x+4)$
Fractions	Use the / symbol but make sure the complete numerator and denominator are each in closed parentheses.	$(3a + b)/(4a)$ $(y+2)/(y-5)$
Exponents	Use the ^ symbol (shift 6) to show the power a something is raised to, if an entire expression is raised to a power make sure to use parentheses.	$X^2$ means $x$ squared $(2x + 4)^3$ means $(2x + 4)$ raised to the 3 <sup>rd</sup> power
Square Root	Use sqrt to represent the square root symbol. Make sure everything that goes under the square root symbol is closed in parentheses.	$\text{sqrt}(4x)$ $\text{sqrt}((x+2)/(x-5))$
Other Radicals	Use nroot to represent any root greater than 2, where the n is the root. Again, make sure everything that goes under the root symbol is closed in parentheses.	$5\text{root}(x+2)$ means the 5 <sup>th</sup> root of $(x+2)$ $3\text{root}(xyz)$ means the 3 <sup>rd</sup> root of $xyz$
	Another way to write different roots is to change them to a fractional exponent.	$(4x)^{(1/2)}$ is the same as $\text{sqrt}(4x)$ or the square root of $4x$ $(x+2)^{(1/5)}$ is the same as $5\text{root}(x+2)$ or the 5 <sup>th</sup> root of $(x+2)$
Absolute Value	Use the   symbol (shift \) to represent the absolute value of a number or expression.	$ 4 $ $ x+2 $
Misc.	Quadratic Equation	$(-b \pm \text{sqrt}(b^2 - 4ac))/(2a)$
	Integral	$\text{INT}[(5-x^3)dx]$ from $-2$ to $2$
	Less than or Greater than	$X \leq 5$ means $x$ is less than or equal to $5$ $x > 3$ means $x$ is greater than $3$
	Area of a circle	$(\pi)r^2$ or $\pi*r^2$