

## How to Type Math

In email, the discussion board, or when submitting your homework, you may find it convenient to quickly type mathematical equations. Here is a notation you can use to type math using “plain text”

Operation	Type	Example
Addition, subtraction,	+ and -	3 + 3, 4 - 5
Division, multiplication	/ and * Or space for multiplication	3 ÷ 4 = ( 3 / 4) or 3 × 25 = 3*25 You can also use a space when multiplying variables 4 × a × b = 4 a b Just make sure its easy to read
Fractions	/	$\frac{3}{4} = 3 / 4$ or $\frac{1-x}{1+x} = (1-x) / (1+x)$
Exponents (powers)	^ (above "6")	10 <sup>2</sup> = 10^2 or 3 <sup>-1</sup> = 3^(-1)
Subscripts	Use the underscore	a <sub>1</sub> would be a_1 although a1 may be just as clear to read.
Squareroots	SQRT ( )	$\sqrt{5} = \text{SQRT}(5)$
Cuberoots	CUBEROOT	$\sqrt[3]{27} = \text{CUBEROOT}(27)$
Sine and cosine	SIN (x) , COS (x)	
Greek letters	ALPHA, BETA, GAMMA, etc.	ω = OMEGA
Pi	PI	π = 3.14157... = PI

- In general you should abbreviate functions or names by typing their name in all capital letters (this makes it easier to spot them)
- Be sure and group things with parenthesis – as many as needed to make things clear
- Use spaces as well to separate things and make it easier to read
- Note that “roots” or “radicals” are also fractional exponents – so instead of CUBEROOT(27) you could type 27^(1/3) – that is 27 to the one-third power.

### Examples:

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	x = ( -b ± SQRT(b^2 - 4 a c)) / ( 2a) <ul style="list-style-type: none"> <li>• Notice use of parenthesis</li> <li>• Note – I typed ± by underlining plus</li> <li>• If you can't do that or are unsure about a symbol then spell it out – PLUSORMINUS for example</li> </ul>
$\Delta x = v_0 t - \frac{1}{2} g t^2$	DELTA X = v0 * t - ( 1/2 ) g t^2 Note use of parenthesis and spaces to add clarity
$\frac{7 - \frac{3}{4} a}{2b}$	( 7 - (3/4) a ) ) / (2b) Note use of parenthesis to make sure the fractions read properly.