

Typing Math in Microsoft Word

It is easy to type equations in Microsoft word, using the *Equation Editor*. The following easy steps demonstrate how to use the Equation Editor.

Step 1: Shortcut to Equation Editor

To add the shortcut to your toolbar, click on “Tools” and then “Customize”. In the “Commands” menu choose “Insert” and find the Equation Editor, as shown below.



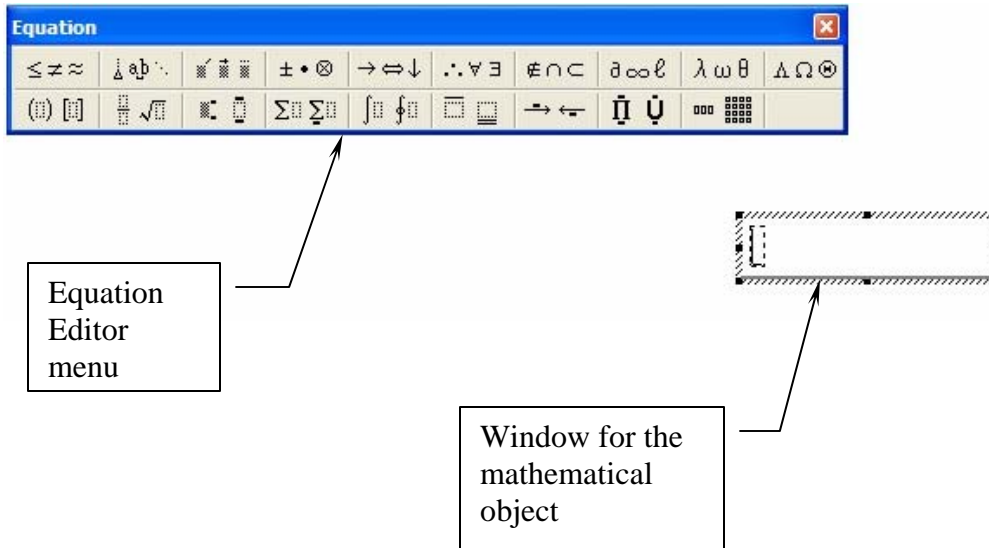
Click on the Equation Editor icon (the one that looks like $\sqrt{\alpha}$) and drag it to the toolbar menu. At the end of this step you should have the Equation Editor icon placed on your toolbar, as shown below.



Equation Editor icon

Step 2: Typing equations.

Each time you want to insert a mathematical expression in a document, place the cursor in the desired location and click on the Equation Editor icon. This will open a window for the mathematical object, and also display the Equation Editor menu, as shown on the next page.



Using the menu, you can insert Greek letters, fractions, parenthesis, and other mathematical symbols in your math object. Once you are finished, to exit the math window you can press the “Esc” button or click with a mouse anywhere outside the math window.

Useful Shortcuts

The Equation Editor has some useful shortcuts that allow you to type the math objects faster. The shortcuts are very intuitive and easy to remember.

1. Ctrl + g gives you the Greek letters. For example, Ctrl + g and a gives you α (alpha), Ctrl + g and b gives β (beta), and so on.
2. Ctrl + f creates the fraction object. For example $\frac{3}{4}$.
3. Ctrl + r creates the root, for example in $\sqrt{4} = 2$.
4. Ctrl + h allows you to insert a superscript and Ctrl + l allows you to insert a subscript. To remember those shortcuts, think of “h” as standing for “high” (superscript) and “l” standing for “low” (subscript). For example, to create x^2 you need to type “x Ctrl+h 2”, and to create A_t you need to type “A Ctrl+l t”.
5. Ctrl + j allows you to insert both superscript and subscript, as in K_t^θ .

There are many more shortcuts that you can use as you progress. They can be found in the Help menu for the Equation Editor (just click on “Help” once you enter the Equation Editor, and then search for “shortcut keys”). As an exercise, type the following math objects.

1. $\int_{-\infty}^{\infty} \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2} dx = 1$
2. $\ln(x^\alpha y^\beta) = \alpha \ln x + \beta \ln y$
3. $k_{t+1} = \frac{(1-\delta)k_t}{1+n} + \frac{sA_t k_t^\theta}{1+n}$