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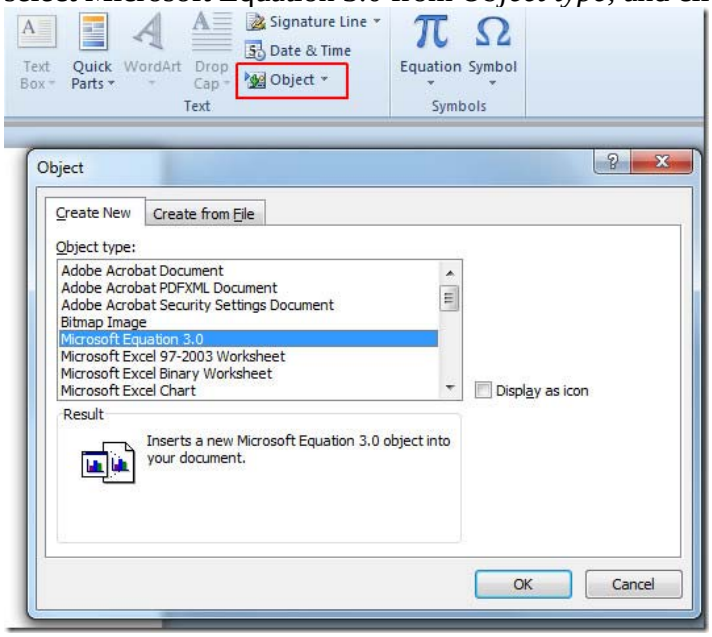
Typing Math in Microsoft Word

The following steps demonstrate how to use the *Equation Editor* of Microsoft Word, in order to type mathematical objects. The notes below are written for Microsoft Word 2010, but other versions work similarly and the Equation Editor itself did not change much in the last 10 years.

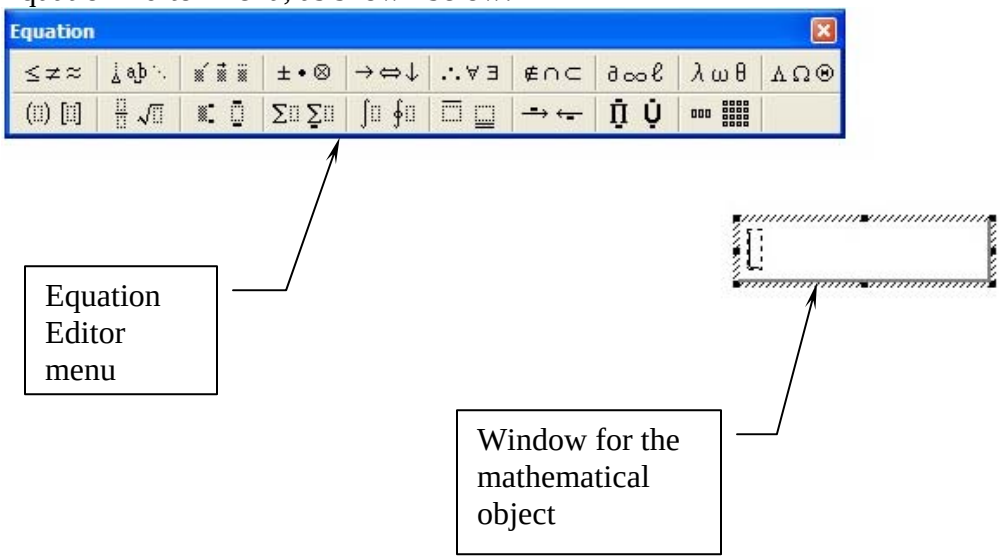
Step 1: Opening the Equation Editor

Navigate to Insert tab, Click *Object*, that will open Object dialog to insert any object, select Microsoft Equation 3.0 from *Object type*, and click *OK*.



Step 2: Typing equations.

The previous step opens a window for the mathematical object, and also displays the Equation Editor menu, as shown below:



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.

Step 3: 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, then Ctrl+h and then 2. To create A_t you need to type A then Ctrl+l and then 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. $\ln\left(x^{\alpha} y^{\beta}\right) = \alpha \ln x + \beta \ln y$
3. $k_{t+1} = \frac{(1-\delta)k_t}{1+n} + \frac{sA_t k_t^{\theta}}{1+n}$