How to use the mathematics editor for MS Word.
To call the "equation" editor click Alt and equal sign key (i.e.: alt =). Following are some examples that I did in did in class:

Insert formula $\int_{a}^{b} f(x) d x=\frac{x}{m}$ in the middle of text, I clicked alt = after the word "formula" to get the editor to put an equation in the middle of the page like below, just start a new line and click alt $=$, here are examples.

$$
\begin{aligned}
& \sum_{i=1}^{\infty} i^{2}=\frac{n(n+1)(2 n+1)}{6} \\
& \alpha \cap \beta=\alpha \cup \beta \Rightarrow \alpha=\beta+\infty
\end{aligned}
$$

When you are finished use the arrow keys to get out of the mathematics "box" and make sure to start a new line before you type anything (otherwise it starts a line with the equation you just wrote).

Make sure you use the mathematics editor for all the formulas and equations in your document; here's a comparison between using it and not using it:
First here's an equation using the equation editor: $x^{2}+y^{2}=z^{2}$; and here's the same equation using superscripts and not the editor: $\mathrm{x}^{2}+\mathrm{y}^{2}=\mathrm{z}^{2}$. Notice how the letters in the former look more italicized than in the latter - the former is the accepted agreed upon mathematics format for writing mathematics in a document. This is what you should use.

As I indicated in class, this editor is based on LaTex. I've placed a link on the class website to information about LaTex.

To get MS Word to type mathematics symbols using the LaTex names, do the following in MS Word:

Go to
File > Options > Proofing
Click the AutoCorrect Options
Click on the Math AutoCorrect tab and click the two boxes there.
Once you've done this you just type in the LaTex name for the symbol - which is typically the back slash $\backslash$ followed by the name in English will give the LaTex symbols. Here's the back slash followed by the English names: alpha, beta, gamma, cap, cup, sum, int, ne, pm:

$$
\alpha \beta \gamma \cap \cup \sum \int \neq \pm
$$

You can use these in the equation editor boxes as well.
Good luck, I look forward to your next set of essays.
-Dr. Smith

