Solutions for 611 Homework 1

Your Name*

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1 Solution to Question 1

You can write equations like this $x^2 + x = \frac{1}{2}$ or $f(n) = O(\log n)$. If it's a long equation you might want to give it a separate line like this:

$$\sum_{i=1}^{n}(i + \log_2 i) = \frac{n}{2}(n+1) + \log_2(n!) = O(n^2)$$

It's also easy to use Greek symbols like $\Theta, \epsilon, \delta, \alpha$, and β.

2 Solution to Question 2

Most of the time you'll just be writing text as you would normally write text. Like this for example. It's really pretty easy to get started. You can find info on using and installing LaTeX on the web. If you use a Mac, I'd recommend TeXShop which you can install from

http://pages.uoregon.edu/koch/texshop/

Remember, you don't *need* to use Latex and if you'd prefer to use Word or plain text, that's absolutely fine.

3 Solution to Question 3

3.1 Solution to Question 3a

3.2 Solution to Question 3b

4 Solution to Question 4

5 Solution to Question 5

*I discussed the homework with Thomas Cormen, Charles Leiserson, and Clifford Stein.