Problem Set 1 Solutions

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Problem 1

Here you'll put your solution to problem 1. A most *excellent* solution to problem 1. Make all of your solutions excellent and you will make me happy. Don't you want me to be happy?

Problem 2

One of the most important aspects of LaTeX is its math mode. Mathematical symbols should look like a or X_5 or A_{ij}^*; never write something like x in ordinary text mode—it looks bad, might be confused with ordinary English text, and a mathematician will likely assume that x, $\mathtt{x}$, x, X, and $\mathcal{X}$ are all intended to mean different things.

Problem 3

To produce an offset formula you can write things like:

$$
\begin{aligned}
\sum_{i=1}^{n} i \;\; &= \;\; \frac{n(n+1)}{2} \\
&\in \;\; O(n^2)
\end{aligned}
$$

Problem 4

I won't suggest that becoming good with LaTeX is easy; it isn't. But CS researchers, grad students, and serious undergrads all use this program—and lots of other scientists and non-scientists do, too. I would even say that LaTeX is the program of choice for all your college essays; the quality of output is a world apart from that you'll get from Word, even when there's not a formula in sight.