

In this .tex file I have started to use a new header, one that uses the commands from the `amsmath` package, which is built into MikTeX and probably the other versions of L^AT_EX that you are likely to find.

It is possible to create your own commands, maybe for a compound symbol or to avoid retyping something repeatedly, by making your own “definitions” (the `amsmath` package calls it a “newcommand”), putting into the file (before the “begin document”) so that if you use the command word you created for them, the whole definition will essentially be placed in the file at that point. I use the the symbols for the integers, the real numbers, and so on, in “blackboard bold” type face, so I use definitions to simplify the commands to get them:

$$\mathbb{Z} \quad \mathbb{R} \quad \mathbb{N} \quad \mathbb{Q} \quad \mathbb{C}$$

Notice the one for matrix: It takes two arguments; the first is where to put entries in each column — left, center or right — and the second is the entries, with row entries separated by ampersands and rows separated by double-backslashes.

$$\left(\begin{array}{ccc} x & x + 1 & x + 2 \\ x + 3 & x^2 & 2x \end{array} \right)$$