

Use the .tex file to see how the output was created.

\mathbb{N}	\mathbb{Z}	\mathbb{Q}	\mathbb{R}	\mathbb{C}
$\frac{a}{b}$	$\sum_{k=1}^n$	\bar{z}	$\int_1^5 x^2 dx$	$\begin{bmatrix} 4 & 5 & 6 \\ 1 & 2 & 3 \end{bmatrix}$

- $f(x) = \begin{cases} x^2 & \text{if } x < 0 \\ -x^2 & \text{if } x \geq 0 \end{cases}$. You will see a “\left\{” and a “\right.” in the .tex file. The \left\{ causes the left curly brace to match the height of what follows. The left must be matched by a right, and the period tells L^AT_EX that I want to leave the right side open. The \mbox{if } puts the word “if” in text mode even though I am really still in math mode.
- Variables and symbols should all be in math mode, but regular text should not. L^AT_EX will choose font types and spacing based on which mode you are in, so you want to make sure text is in text mode and math is in math mode.
- In the commands for tables and arrays, the c, l, and r refer to the alignment of the entries in each column: center, left, or right. Columns are separated by ampersands (&) and rows are ended with double backslashes (\\).

1. Download LaTeX
2. Copy this .tex file and try writing your own code.
3. Compile your code.
4. View your fabulous looking math document!!!!