

To get all the special effects, a `.tex` file is filled with command symbols, like the ones that generated the accents, or command words, like the ones that manipulated the page size. The latter have to be ended by a non-letter — which is why  $\text{\TeX}$  needs the backslash-space after it, because otherwise there would have been no space before `Archive`.

And to get all the fancy math symbols, the  $\text{\LaTeX}$  compiler must go into “math mode”, which I do with a dollar sign `$`, but that is a leftover from  $\text{\TeX}$  —  $\text{\LaTeX}$  has two other methods. If I want to put the formulas in the center of the page, with a little space above and below, I use `$$` to put the compiler into “display math mode”. (To get out of these modes and back into “text mode”, I give the same command again.) In these modes, the letters look a little “italic” — they have a slight slant; to get normal-looking letters in math mode, I have to put them in a group, separated with braces `{` and `}`, that starts with `\rm`. Also, whatever spacing I might type is essentially ignored by the compiler — if I want specific spacing, I have to specify it, with normal spaces (`\space`), small spaces (like between  $x$  and  $dx$  in  $\int x dx$ , done by `\,comma`), big spaces (`\quad` — this is a command word, not a command symbol) and huge spaces (`\quadquad`).