

L^AT_EX: Punctuation Symbols and Their Meaning

W. Ethan Duckworth, Loyola University Maryland, 2014

- Ordinary characters. All the letters, a–z, A–Z, and numbers 0–9 produce ordinary output, just what you’d expect. Also

! @ * () [] / ? . , | : ; - + =

Note that < and < are only half ordinary: they work, as shown here, but only in math mode. Outside of math mode you get j and j.

- Special input characters:

\ starts each command: adding \ to the beginning of `\underline{this}` makes this. You can print \ with `\textbackslash`.

\$ turn text-mode math on/off: “`x^2`” makes x^2 . You can print \$ with `\$`

\$\$ turn display math on/off: “`$$x^2$$`” makes

$$x^2$$

You can print \$\$ with `\$\$`.

% internal comment: entering “`% you can't see this`” makes . You can print % with `\%`.

_ subscript: “`x_1`” makes x_1 . You can print _ with `_`.

^ superscript: “`x^2`” makes x^2 . You can print ^ with `\textasciicircum`.

& column marker in arrays/tables. For instance,

```
\begin{tabular}{cc}
a & b \\
c & d
\end{tabular}
```

makes

a	b
c	d

. You can print & with `\&`.

stands for command arguments when you define a new command. For instance,

```
\newcommand{\foo}[1]{x^{#1}$}
```

followed by `\foo{2}` makes x^2 . You can print # with `\#`.

{ } group command inputs. For instance, `x_{123}` makes x_{123} , but `x_{123}` makes x_{123} . You can print { and } with `\{` and `\}`.

~ creates a nonbreaking space. For instance, `Mr. ~Doe` makes Mr. Doe, but will never allow a line break between Mr. and Doe.

- Quotation marks. L^AT_EX makes fancy looking quotation marks.

Example 1. Input:

The marks on the left and right look different like ``this''.

Output:

The marks on the left and right look different like “this”.

Your text editor should automatically insert the correct marks at the correct time. In other words, if you just hit `shift-"`, then it will probably insert the right kind of quotation marks.

However, if you have to enter the quotation marks manually, note that “ is made by hitting `~` twice, and ” is made by hitting `"` twice (or entering `shift-"` once).

- Other fancy symbols.

- I’ve made a one page quick reference guide to the most common symbols. You’ll see there how to make things like \int , \sqrt{x} , $\sum \frac{1}{n^2}$, etc.
- L^AT_EX has access to a few thousand special symbols. Google “The Comprehensive L^AT_EX Symbol List” to see more.