

L^AT_EX Commands and Resources

General Commands

Command	What it does	Example if applicable
<code>%</code>	Hides subsequent text on the line from the compiler	<code>%This won't show</code>
<code>pt, in, cm</code>	Units used in commands that involve dimension. <code>pt</code> is used for points, <code>in</code> is used for inches. <code>cm</code> is used for centimeters.	
<code>\vspace{}</code>	Adds vertical space	<code>\vspace{1in}</code>
<code>\hspace{}</code>	Adds horizontal space	<code>\hspace{10pt}</code>
<code>\newpage</code>	Ends the page and starts a new one	
<code>\input{}</code>	Inserts a tex file into the document	<code>\input{filename}</code>
<code>\textit{}</code>	Italicizes what is inside the <code>{}</code>	<code>\textit{Italicize this}</code>
<code>\textbf{}</code>	Bolds what is inside the <code>{}</code>	<code>\textbf{Bold this}</code>
<code>\includegraphics [] {}</code>	Insert an image	<code>\includegraphics [] {a.png}</code>

List Commands

Command	What it does
<code>\begin{itemize}</code>	Begins a bulleted list
<code>\end{itemize}</code>	Ends a bulleted list
<code>\begin{enumerate}</code>	Begins a numbered list
<code>\end{enumerate}</code>	Ends a numbered list
<code>\item</code>	Starts a new item in your list
<code>\begin{enumerate}[label=]</code>	Will adjust the labels to whatever come after the =
<code>\begin{enumerate}[label=(\alph*)]</code>	labels (a), (b), ...
<code>\begin{enumerate}[label=\Alph*]</code>	labels A), B), ...
<code>\begin{enumerate}[label=\roman*.]</code>	labels i., ii., ...
<code>\begin{enumerate}[label=\Roman*]</code>	labels I, II, ...

Table Commands

Command	What it does
<code>\begin{tabular}{}</code>	Begins a table. Inside the <code>{}</code> designates column formatting
<code>\end{tabular}</code>	Ends a table
<code>r</code>	Right justified column
<code>c</code>	Center justified column
<code>l</code>	Left justified column
<code>p{}</code>	Creates a paragraph style column of width indicated inside the <code>{}</code>
<code> </code>	When placed between columns will create a vertical line in the table
<code>\hline</code>	Creates a horizontal line between rows
<code>&</code>	Indicates to move to the next cell
<code>\\</code>	Ends a row

Math Commands

Command	What it does
<code>\$</code>	Begins and ends the math environment
<code>\$\$</code>	Begins and ends the displaystyle math environment
<code>\left(\right)</code>	Automatically sized parentheses
<code>\left[\right]</code>	Automatically sized brackets
<code>\left\{\right\}</code>	Automatically sized curly braces
<code>\sqrt[]{}{}</code>	Creates a square root where inside the <code>[]</code> is the index and inside the <code>{}</code> is the radicand
<code>\frac{}{}{}</code>	Creates an inline fraction. The first <code>{}</code> is the numerator and the second <code>{}</code> is the denominator
<code>\dfrac{}{}{}</code>	Creates a displaystyle sized fraction without requiring the entire math environment be displaystyle
<code>^{}{}</code>	Creates a power with the power inside the <code>{}</code>
<code>\log_{}{}{}</code>	Creates a log with base in the first <code>{}</code> and the input in the second <code>{}</code>
<code>\sin</code>	sin
<code>\cos</code>	cos
<code>\tan</code>	tan
<code>\cdot</code>	.
<code>\circ</code>	o
<code>\pi</code>	π
<code>\neq</code>	\neq
<code>\leq</code>	\leq
<code>\geq</code>	\geq

Beamer

Command	What it does
<code>\documentclass[pdf]{beamer}</code>	Preamble designation to use beamer
<code>\begin{frame}{}{}</code>	Begins a slide. Inside the empty <code>{}</code> is where the slide title is typed if needed
<code>\end{frame}{}{}</code>	Ends a slide.
<code>\pause</code>	Shows content up until the <code>\pause</code> , then displays the content after separately

Tikz

Command	What it does
<code>\begin{tikzpicture}</code>	Begin a tikz image
<code>\end{tikzpicture}</code>	End a tikz image
<code>\draw (a, b)--(c, d);</code>	Draws a line segment from (a, b) to (c,d)
<code>\draw (a, b) rectangle (c, d);</code>	Draws a rectangle with a lower left vertex of (a, b) and upper right vertex of (c,d)
<code>\draw (a, b) circle (d);</code>	Draws a circle centered at (a,b) with radius d
<code>\draw[smooth,samples=100,domain=a:b] plot(\x,{});</code>	Creates a graph of what is included in the {} on the domain [a, b]
<code>\node (A) at (a,b) [] {};</code>	Creates a node named A at (a,b) with the anchor set by [] and any text included in the {}
<code>\coordinate (A) at (a,b);</code>	Creates a coordinate named A at (a,b)

Sections

Command	What it does	Example if applicable
<code>\section{}</code>	Creates a numbered heading that is “section sized.” The title is placed inside the {}	<code>\section{My Title}</code>
<code>\section*{}</code>	Creates a heading that is “section sized” but removes the numbering. The title is placed inside the {}	<code>\section*{My Title}</code>
<code>\subsection{}</code>	Creates a numbered heading that is “subsection sized.” The title is placed inside the {}	<code>\subsection{My Title}</code>
<code>\subsection*{}</code>	Creates a heading that is “subsection sized” but removes the numbering. The title is placed inside the {}	<code>\subsection*{My Title}</code>
<code>\subsubsection{}</code>	Creates a numbered heading that is “subsubsection sized.” The title is placed inside the {}	<code>\subsubsection{My Title}</code>
<code>\subsubsection*{}</code>	Creates a heading that is “subsubsection sized” but removes the numbering. The title is placed inside the {}	<code>\subsubsection*{My Title}</code>

Resources

Website	URL
Detexify	https://detexify.kirelabs.org/classify.html
TeX StackExchange	https://tex.stackexchange.com/