

LaTeX

- [Used Packages](#)

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Packages

fontspec `\usepackage{fontspec}`

Advanced Font Selection: Allows you to use any OpenType or TrueType font installed on your system. Note that this requires compiling with XeLaTeX or LuaLaTeX instead of pdfLaTeX.

babel-czech `\usepackage[czech]{babel}`

Czech Localization: Provides Czech-specific hyphenation patterns, translated document strings (like "Obsah" instead of "Table of Contents"), and support for Czech quotes.

amsmath `\usepackage{amsmath}`

Mathematical Enhancements: The industry standard for math typesetting, providing superior alignment for multi-line equations and advanced mathematical structures.

amsfonts `\usepackage{amsfonts}`

AMS Fonts: Provides a broad range of mathematical fonts, including the necessary glyphs for "blackboard bold" characters like the sets of real or natural numbers.

amssymb `\usepackage{amssymb}`

Extended Symbol Set: Grants access to a vast collection of mathematical symbols that are not included in the standard LaTeX base.

amsthm `\usepackage{amsthm}`

Theorem Styling: Provides a flexible mechanism for defining and styling "Theorem," "Lemma," "Definition," and "Proof" environments with consistent formatting.

graphicx `\usepackage{graphicx}`

Image Handling: The essential package for inserting external graphics (PNG, JPG, PDF) into your document, allowing for scaling, rotating, and cropping.

xcolor `\usepackage{xcolor}`

Color Management: Extends LaTeX's ability to handle colors, allowing for custom color definitions, colored text, and background shading for table rows or boxes.

url `\usepackage{url}`

URL Formatting: Specifically designed for typesetting web addresses. It ensures URLs use a monospaced font and "break" naturally at the end of lines without breaking the link.

textcomp `\usepackage{textcomp}`

Extended Text Symbols: Provides support for the TS1 encoding, which includes extra symbols like the Euro sign (€), copyright symbols, and musical notes.

parskip `\usepackage{parskip}`

Paragraph Spacing: Modernizes the document layout by adding vertical space between paragraphs and removing the standard first-line indentation.

booktabs `\usepackage{booktabs}`

Professional Tables: Provides high-quality horizontal rules (`\toprule`, `\midrule`, `\bottomrule`) to create clean, publication-quality tables without the need for ugly vertical lines.

icomma `\usepackage{icomma}`

Czech Number Format: Fixes the math-mode spacing issue where LaTeX normally treats a comma as a separator (adding a space), allowing it to act correctly as a decimal point (e.g., 0,03).

Installation

Debian / Ubuntu

```
sudo apt update
sudo apt install texlive-latex-recommended texlive-latex-extra texlive-lang-czechslovak
texlive-xetex
```

or the full package (large download)

```
sudo apt update
sudo apt install texlive-full
```

Fedora

```
sudo dnf install 'tex(fontspec.sty)' 'tex(babel-czech)' 'tex(amsmath.sty)' \  
'tex(amsfonts.sty)' 'tex(amssymb.sty)' 'tex(amsthm.sty)' 'tex(graphicx.sty)' \  
'tex(xcolor.sty)' 'tex(url.sty)' 'tex(textcomp.sty)' 'tex(parskip.sty)' \  
'tex(booktabs.sty)' 'tex(icomma.sty)'
```

or

```
sudo dnf install texlive-collection-latexrecommended texlive-collection-latexextra texlive-  
collection-langczechslovak texlive-xetex-bin
```

or the full package (large download)

```
sudo dnf install texlive-scheme-full
```