

# Príklady písania vzorcov a rovníc v syntaxi L<sup>A</sup>T<sub>E</sub>Xu

$\backslash(x_{ij}^n)$	$\rightarrow x_{ij}^n$
$\backslash(\lim_{x\to\infty}x^{1/x}=1)$	$\rightarrow \lim_{x\to\infty}x^{1/x} = 1$
$\backslash(\lim\limits_{x\to\infty}x^{1/x}=1)$	$\rightarrow \lim_{x\to\infty}x^{1/x} = 1$
$\backslash(\sum_{k=0}^{n-1}f_n \cdot \mathrm{e}^{2\pi i k/n})$	$\rightarrow \sum_{k=0}^{n-1}f_n \cdot e^{-2\pi i k/n}$
$\backslash(\sum\limits_{k=0}^{n-1}f_n \cdot \mathrm{e}^{2\pi i k/n})$	$\rightarrow \sum_{k=0}^{n-1}f_n \cdot e^{-2\pi i k/n}$
$\backslash(\frac{\sin \alpha}{\cos \beta})$	$\rightarrow \frac{\sin \alpha}{\cos \beta}$
$\backslash(\int\limits_a^b f(\xi)\, \mathrm{d}\xi)$	$\rightarrow \int_a^b f(\xi) d\xi$
$\backslash(\frac{\sin \alpha}{\cos \beta})$	$\rightarrow \frac{\sin \alpha}{\cos \beta}$
$\backslash(\mathrm{d}\frac{\sin \alpha}{\cos \beta})$	$\rightarrow \frac{\sin \alpha}{\cos \beta}$
$\backslash(\sqrt[3]{a^2+b^2})$	$\rightarrow \sqrt[3]{a^2 + b^2}$

$\backslash\def\{&\} \backslash\def\{<\} \backslash\def\{>\}$

$\backslash[$

$A=\backslashleft[ \backslashbegin{array}{ccc}$

$a_{1,1} \backslasha \backslashcdots \backslasha a_{1,n} \backslash\backslash$

$\backslashvdots \backslasha \backslashddots \backslasha \backslashvdots \backslash\backslash$

$a_{n,1} \backslasha \backslashcdots \backslasha a_{n,n} \backslash\backslash$

$\backslashend{array}\backslashright]$

$\backslash]$

$$A = \begin{bmatrix} a_{1,1} & \cdots & a_{1,n} \\ \vdots & \ddots & \vdots \\ a_{n,1} & \cdots & a_{n,n} \end{bmatrix}$$

$\backslash[ |x|=\backslashleft\{ \backslashbegin{array}{rl}$

$x, \backslasha x \backslashgeqq 0, \backslash\backslash[2mm]$

$-x, \backslasha x \backslashlt 0.$

$\backslashend{array}\backslashright. \backslash]$

$$|x| = \begin{cases} x, & x \geq 0, \\ -x, & x < 0. \end{cases}$$

$\backslashbegin{equation}\backslashlabel{CIV}$

$f(z_0)=\backslashfrac{1}{2\pi i}$

$\backslashoint\limits_{\Gamma}$

$\backslashfrac{f(z)}{z-z_0} \backslash\mathrm{d}z$

$\backslashend{equation}$

$$f(z_0) = \frac{1}{2\pi i} \oint_{\Gamma} \frac{f(z)}{z - z_0} dz \quad (1)$$

Vzťah  $\backslasheqref{CIV}$  sa nazýva Cauchyho integrálny vzorec.

Vzťah (1) sa nazýva Cauchyho integrálny vzorec.

$\backslashbegin{equation}\backslashlabel{GV}$

$\backslashiint\limits_A \backslashleft($

$\backslashfrac{\backslashpartial Q}{\backslashpartial x}-$

$\backslashfrac{\backslashpartial P}{\backslashpartial y}\backslashright)$

$\backslash,\backslash\mathrm{d}x\backslash,\backslash\mathrm{d}y=$

$\backslashoint\limits_{\gamma}$

$P\backslash,\backslash\mathrm{d}x+Q\backslash,\backslash\mathrm{d}y.$

$\backslashend{equation}$

$$\iint_A \left( \frac{\partial Q}{\partial x} - \frac{\partial P}{\partial y} \right) dx dy = \oint_{\gamma} P dx + Q dy. \quad (2)$$

Greenova veta  $\backslasheqref{GV}$  sa používa pri dôkaze vzorca  $\backslasheqref{CIV}$ .

Greenova veta (2) sa používa pri dôkaze vzorca (1).

Ďalšie informácie: <http://www.ctan.org/tex-archive/info/lshort/>