latex-math Macros

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Latex macros like **\frac{#1}{#2}** with arguments are displayed as $\frac{\#1}{\#2}.$

${\bf Contents}$

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basic-math

Macro	Notation	Comment
\N	${ m I\!N}$	N, naturals
\Z	${\mathbb Z}$	Z, integers
\ Q	$\mathbb Q$	Q, rationals
\R	\mathbb{R}	R, reals
\C	${\Bbb C}$	C, complex
\continuous	$\mathcal C$	C, space of continuous functions
\M	\mathcal{M}	machine numbers
\epsm	ϵ_m	maximum error
\xt	$ ilde{x}$	x tilde
\sign	sign	sign, signum
\I	${\mathbb I}$	I, indicator
\Ind	1	1, indicator
\order	\mathcal{O}	O, order
\fp	$\frac{\partial \#1}{\partial \#2}$	partial derivative
\pd	$\frac{\partial \#1}{\partial \#1}$	partial derivative
\sumin	$\sum_{i=1}^{O\#2}$	summation from i=1 to n
\sumjp	$\sum_{j=1}^{p}$	summation from $j=1$ to p
\sumik	$\sum_{i=1}^{k}$	summation from $i=1$ to k
\sumkg	$\begin{array}{l} \frac{\partial \#1}{\partial \#2} \\ \frac{\partial \#1}{\partial \#2} \\ \frac{\partial \#1}{\partial \#2} \\ \sum\limits_{i=1}^{p} \\ \sum\limits_{i=1}^{k} \\ \sum\limits_{j=1}^{k} \\ \sum\limits_{j=1}^{g} \end{array}$	summation from $k=1$ to g
\sumjg	$\sum_{j=1}^{g}$	summation from $j=1$ to g
\meanin	$\frac{1}{n} \sum_{i=1}^{n}$	mean from $i=1$ to n
\meankg	$\frac{1}{g} \sum_{k=1}^{g}$	mean from $k=1$ to g
\prodin	$\prod_{i=1}^{n-1}$	product from i=1 to n
\prodkg	$\lim_{k=1}$	product from k=1 to g
\prodjp	$\prod_{j=1}^{p}$	product from j=1 to p
\one	1	1, unit vector
\zero	0	0-vector
\id	I	I, identity
\diag	diag	diag, diagonal
\trace	tr	tr, trace
\spn	span	span
\scp	$\langle #1, #2 \rangle$	
\Amat	\mathbf{A}	matrix A
\xv	X	vector x (bold)
\xtil	$\tilde{\mathbf{x}}$	vector x-tilde (bold)

\yv	\mathbf{y}	vector y (bold)
\Deltab	$oldsymbol{\Delta}$	error term for vectors
\E	${ m I\!E}$	E, expectation
\var	Var	Var, variance
\cov	Cov	Cov, covariance
\corr	Corr	Corr, correlation
\normal	$\mathcal N$	N of the normal distribution
\iid	$\overset{i.i.d}{\sim}$	dist with i.i.d superscript
\distas	$\overset{\#1}{\sim}$	is distributed as
\ind	Т	is independent of