LaTeX Math Symbols

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File A.tex contains all necessary code
This file is prepared by running
latex A.tex
and cutting the pictures out of the resulting preview. Relevant parts of the latex code are reproduced under each of the pictures.
Some of the symbols have an explanatory text. This text is found in the latex code, mostly stating that they are parts of some spacial setup and cannot be used in standard LaTeX. Each of the figures also has a link to itself.

Greek Letters

α	\alpha	θ	\theta	o	o	τ	\tau
β	\beta	ϑ	\vartheta	π	\pi	υ	\upsilon
γ	\gamma	γ	\gamma	ϖ	\varpi	ϕ	\phi
δ	\delta	κ	\kappa	ρ	\rho	φ	\varphi
ϵ	\epsilon	λ	\lambda	ϱ	\varrho	χ	\chi
ε	\varepsilon	μ	\mu	σ	\sigma	ψ	\psi
ζ	\zeta	ν	\nu	ς	\varsigma	ω	\omega
η	\eta	ξ	\xi				
Γ	\Gamma	Λ	\Lambda	Σ	\Sigma	Ψ	\Psi
Δ	\Delta	Ξ	\Xi	Υ	\Upsilon	Ω	\Omega
Θ	\Theta	Π	\Pi	Φ	\Phi		

Table 1: Greek Letters

t1.gif

```
\alpha          \theta          o               \tau
\beta           \vartheta       \pi             \upsilon
\gamma          \gamma          \varpi          \phi
\delta          \kappa          \rho            \varphi
\epsilon        \lambda         \varrho         \chi
\varepsilon     \mu             \sigma          \psi
\zeta           \nu             \varsigma       \omega
\eta            \xi

\Gamma          \Lambda         \Sigma          \Psi
\Delta          \Xi             \Upsilon        \Omega
\Theta          \Pi             \Phi
```

Binary Operation Symbols

$\pm$	\pm	$\cap$	\cap	$\diamond$	\diamond	$\oplus$	\oplus
$\mp$	\mp	$\cup$	\cup	$\bigtriangleup$	\bigtriangleup	$\ominus$	\ominus
$\times$	\times	$\uplus$	\uplus	$\bigtriangledown$	\bigtriangledown	$\otimes$	\otimes
$\div$	\div	$\sqcap$	\sqcap	$\triangleleft$	\triangleleft	$\oslash$	\oslash
$*$	\ast	$\sqcup$	\sqcup	$\triangleright$	\triangleright	$\odot$	\odot
$\star$	\star	$\vee$	\vee	$\lhd^b$	\lhd	$\bigcirc$	\bigcirc
$\circ$	\circ	$\wedge$	\wedge	$\rhd^b$	\rhd	$\dagger$	\dagger
$\bullet$	\bullet	$\setminus$	\setminus	$\unlhd^b$	\unlhd	$\ddagger$	\ddagger
$\cdot$	\cdot	$\wr$	\wr	$\unrhd^b$	\unrhd	$\amalg$	\amalg
$+$	+	$-$	-				

t2.gif

\pm	\cap	\diamond	\oplus
\mp	\cup	\bigtriangleup	\ominus
\times	\uplus	\bigtriangledown	\otimes
\div	\sqcap	\triangleleft	\oslash
\ast	\sqcup	\triangleright	\odot
\star	\vee	\lhd^b	\bigcirc
\circ	\wedge	\rhd^b	\dagger
\bullet	\setminus	\unlhd^b	\ddagger
\cdot	\wr	\unrhd^b	\amalg
+	-		

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{\tt oldlfont}, {\tt newlfont}, {\tt amsfonts} or {\tt amssymb}.

Relation Symbols

$\leq$	\leq	$\geq$	\geq	$\equiv$	\equiv	$\models$	\models
$\prec$	\prec	$\succ$	\succ	$\sim$	\sim	$\perp$	\perp
$\preceq$	\preceq	$\succeq$	\succeq	$\simeq$	\simeq	$\mid$	\mid
$\ll$	\ll	$\gg$	\gg	$\asymp$	\asymp	$\parallel$	\parallel
$\subset$	\subset	$\supset$	\supset	$\approx$	\approx	$\bowtie$	\bowtie
$\subseteq$	\subseteq	$\supseteq$	\supseteq	$\cong$	\cong	$\Join^b$	\Join^b
$\sqsubset^b$	\sqsubset^b	$\sqsupset^b$	\sqsupset^b	$\neq$	\neq	$\smile$	\smile
$\sqsubseteq$	\sqsubseteq	$\sqsupseteq$	\sqsupseteq	$\doteq$	\doteq	$\frown$	\frown
$\in$	\in	$\ni$	\ni	$\propto$	\propto	$=$	=
$\vdash$	\vdash	$\dashv$	\dashv	$<$	<	$>$	>
:	:						

t3.gif

\leq	\geq	\equiv	\models
\prec	\succ	\sim	\perp
\preceq	\succeq	\simeq	\mid
\ll	\gg	\asymp	\parallel
\subset	\supset	\approx	\bowtie
\subseteq	\supseteq	\cong	\Join^b
\sqsubset^b	\sqsupset^b	\neq	\smile
\sqsubseteq	\sqsupseteq	\doteq	\frown
\in	\ni	\propto	=
\vdash	\dashv	<	>
:			

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Punctuation Symbols

, , ; ; : \colon . \ldotp · \cdotp

Table 4: Punctuation Symbols

t4.gif

,	;	\colon	\ldotp	\cdotp

Arrow Symbols

←	\leftarrow	⟵	\longleftarrow	↑	\uparrow
⇐	\Leftarrow	⟸	\Longleftarrow	⇑	\Uparrow
→	\rightarrow	⟶	\longrightarrow	↓	\downarrow
⇒	\Rightarrow	⟹	\Longrightarrow	⇓	\Downarrow
↔	\leftrightarrow	⟷	\longleftrightarrow	↕	\updownarrow
⇔	\Leftrightarrow	⟺	\Longleftrightarrow	⇕	\Updownarrow
↦	\mapsto	⟼	\longmapsto	↗	\nearrow
↩	\hookleftarrow	↪	\hookrightarrow	↘	\searrow
↼	\leftharpoonup	⇀	\rightharpoonup	↙	\swarrow
↽	\leftharpoondown	⇁	\rightharpoondown	↖	\nwarrow
⇌	\rightleftharpoons	⇝	\leadsto^b		

t5.gif

```
\leftarrow                  \longleftarrow              \uparrow
\Leftarrow                  \Longleftarrow              \Uparrow
\rightarrow                 \longrightarrow             \downarrow
\Rightarrow                 \Longrightarrow             \Downarrow
\leftrightarrow             \longleftrightarrow         \updownarrow
\Leftrightarrow             \Longleftrightarrow         \Updownarrow
\mapsto                     \longmapsto                 \nearrow
\hookleftarrow              \hookrightarrow             \searrow
\leftharpoonup              \rightharpoonup             \swarrow
\leftharpoondown            \rightharpoondown           \nwarrow
\rightleftharpoons          \leadsto$^b$

$^b$ Not predefined in a format based on {\tt basefont.tex}.
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```

Miscellaneous Symbols

…	\ldots	⋯	\cdots	⋮	\vdots	⋱	\ddots
ℵ	\aleph	′	\prime	∀	\forall	∞	\infty
ℏ	\hbar	∅	\emptyset	∃	\exists	□	\Box^b
ı	\imath	∇	\nabla	¬	\neg	◇	\Diamond^b
ȷ	\jmath	√	\surd	♭	\flat	△	\triangle
ℓ	\ell	⊤	\top	♮	\natural	♣	\clubsuit
℘	\wp	⊥	\bot	♯	\sharp	◇	\diamondsuit
ℜ	\Re	∥	\\|	\	\backslash	♡	\heartsuit
ℑ	\Im	∠	\angle	∂	\partial	♠	\spadesuit
℧	\mho^b	.	.	|	|		

t6.gif

```
\ldots                      \cdots                      \vdots                      \ddots
\aleph                      \prime                      \forall                     \infty
\hbar                       \emptyset                   \exists                     \Box$^b$
\imath                      \nabla                      \neg                        \Diamond$^b$
\jmath                      \surd                       \flat                       \triangle
\ell                        \top                        \natural                    \clubsuit
\wp                         \bot                        \sharp                      \diamondsuit
\Re                         \|                          \backslash                  \heartsuit
\Im                         \angle                      \partial                    \spadesuit
\mho$^b$                    .                           |
```

```
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```

Variable-sized Symbols

$\sum$	\sum	$\bigcap$	\bigcap	$\bigodot$	\bigodot
$\prod$	\prod	$\bigcup$	\bigcup	$\bigotimes$	\bigotimes
$\coprod$	\coprod	$\bigsqcup$	\bigsqcup	$\bigoplus$	\bigoplus
$\int$	\int	$\bigvee$	\bigvee	$\biguplus$	\biguplus
$\oint$	\oint	$\bigwedge$	\bigwedge		

Table 7: Variable-sized Symbols

t7.gif

```
\sum                \bigcap             \bigodot
\prod               \bigcup             \bigotimes
\coprod             \bigsqcup           \bigoplus
\int                \bigvee             \biguplus
\oint               \bigwedge
```

Log-like Symbols

\arccos	\cos	\csc	\exp	\ker	\limsup	\min	\sinh
\arcsin	\cosh	\deg	\gcd	\lg	\ln	\Pr	\sup
\arctan	\cot	\det	\hom	\lim	\log	\sec	\tan
\arg	\coth	\dim	\inf	\liminf	\max	\sin	\tanh

Table 8: Log-like Symbols

t8.gif

```
\arccos     \cos       \csc      \exp      \ker        \limsup      \min      \sinh
\arcsin     \cosh      \deg      \gcd      \lg         \ln       \Pr       \sup
\arctan     \cot       \det      \hom      \lim        \log       \sec      \tan
\arg        \coth      \dim      \inf      \liminf     \max       \sin      \tanh
```

Delimiters

(	(	)	)	$\uparrow$	\uparrow	$\Uparrow$	\Uparrow
[	[	]	]	$\downarrow$	\downarrow	$\Downarrow$	\Downarrow
{	\{	}	\}	$\updownarrow$	\updownarrow	$\Updownarrow$	\Updownarrow
$\lfloor$	\lfloor	$\rfloor$	\rfloor	$\lceil$	\lceil	$\rceil$	\rceil
$\langle$	\langle	$\rangle$	\rangle	/	/	\	\backslash
$\vert$	|	$\Vert$	\\|				

Table 9: Delimiters

t9.gif

```
(                   )                   \uparrow            \Uparrow
[                   ]                   \downarrow          \Downarrow
\{                  \}                  \updownarrow        \Updownarrow
\lfloor             \rfloor             \lceil              \rceil
\langle             \rangle             /                   \backslash
|                   \|
```

Large Delimiters

⎱	\rmoustache	⎰	\lmoustache	⎱	\rgroup	⎰	\lgroup
⎪	\arrowvert	‖	\Arrowvert	⎪	\bracevert		

Table 10: Large Delimiters

t10.gif

```
\rmoustache     \lmoustache     \rgroup         \lgroup
\arrowvert      \Arrowvert      \bracevert
```

Math mode accents

$\hat{a}$	\hat{a}	$\acute{a}$	\acute{a}	$\bar{a}$	\bar{a}	$\dot{a}$	\dot{a}	$\breve{a}$	\breve{a}
$\check{a}$	\check{a}	$\grave{a}$	\grave{a}	$\vec{a}$	\vec{a}	$\ddot{a}$	\ddot{a}	$\tilde{a}$	\tilde{a}

Table 11: Math mode accents

t11.gif

```
\hat{a}         \acute{a}       \bar{a}         \dot{a}         \breve{a}
\check{a}       \grave{a}       \vec{a}         \ddot{a}        \tilde{a}
```

Some other constructions

$\widetilde{abc}$	\widetilde{abc}	$\widehat{abc}$	\widehat{abc}
$\overleftarrow{abc}$	\overleftarrow{abc}	$\overrightarrow{abc}$	\overrightarrow{abc}
$\overline{abc}$	\overline{abc}	$\underline{abc}$	\underline{abc}
$\overbrace{abc}$	\overbrace{abc}	$\underbrace{abc}$	\underbrace{abc}
$\sqrt{abc}$	\sqrt{abc}	$\sqrt[n]{abc}$	\sqrt[n]{abc}
f'	f'	$\frac{abc}{xyz}$	\frac{abc}{xyz}

Table 12: Some other constructions

t12.gif

```
\widetilde{abc}                 \widehat{abc}
\overleftarrow{abc}             \overrightarrow{abc}
\overline{abc}                  \underline{abc}
\overbrace{abc}                 \underbrace{abc}
\sqrt{abc}                      \sqrt[n]{abc}
$f'$                            \frac{abc}{xyz}
```