

FdSymbol: A Math Symbol Font

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1 Introduction

FdSymbol is a font of mathematical symbols designed as a companion to Typotheque’s Fedra family¹, but it might also fit well to other contemporary typefaces. To use this font in a L^AT_EX document, add the command

```
\usepackage[<options>]{fdsymbol}
```

to the preamble of your document. This redefines most of the standard mathematical symbols and makes available many new ones (see Section 4). For the available options see Section 3.

¹<http://www.typotheque.com/fonts>

Acknowledgements

The FdSymbol font is derived from MnSymbol², another math symbol font, designed by Achim Blumensath.

2 Interferences with other packages

The fdsymbol package is incompatible with the amssymb and amsfonts packages. It automatically loads the amsmath and textcomp packages. If you want to pass options to these packages, you can either load these packages before fdsymbol or you can include the options in the `\documentclass` command.

3 Font selection

FdSymbol comes in four weights, which are (in increasing order) Book, Regular, Medium and Bold. Of these, Book and Regular are suitable for normal math typesetting, while Medium and Bold can be used for bold math typesetting. Using the options `normalweight` and `boldweight`, you can select which weights are used. For example, to use the Medium weight as the normal weight in math, add `normalweight=Medium` to the package options. Analogously, to use the Bold weight with `\boldmath` or `\boldsymbol`, add `boldweight=Bold` to the package options. By default, Book and Medium are used. Additionally, it is possible to use a suitable weight automatically depending on the font size by selecting `auto`. For example, if you use the option `normalweight=auto`, the Book weight will be used for normal and large sizes, but the Regular weight will be used for small sizes (e.g. in sub- and superscripts).

In order to use FdSymbol with different text fonts, it is possible to scale the fonts by an arbitrary factor. This can be achieved with the option `scale`. For example, to use the fonts at 90 % of their original size, you can add `scale=0.9` to the package options. Finally, it is possible to increase the height of delimiters slightly (by 20 % in text size and by 25 % in `\big` size). This can be achieved by activating the option `largedelims`. Use this option if you want to combine FdSymbol with a text font that has rather tall delimiters, such as Fedra Serif B. In fact, the height of normal delimiters will match the height of text delimiters in Fedra Serif B if you select this option.

The following table summarises all options (keys) that can be used with the fdsymbol package. Values that correspond to the default behaviour of the package are marked by an asterisk.

²<http://www.ctan.org/tex-archive/fonts/mnsymbol/>

Key	Values
normalweight	Book*, Regular, auto
boldweight	Medium*, Bold, auto
scale	$\langle factor \rangle$
largedelims	true, false*

4 Symbols

The fdsymbol package provides the following symbols.

4.1 Ordinary symbols

...	\hdots		\mdwhtlozenge
:	\vdots	◆	\medblacklozenge,
⋮	\udots, \adots		\blacklozenge,
⋱	\ddots		\mdlgbklozenge,
∴	\righttherefore		\mdbklozenge
∵	\uptherefore, \therefore	⋄	\lozengeminus
∴	\lefttherefore	☆	\largewhitestar
∵	\downtherefore, \because	★	\largeblackstar, \bigstar
::	\squaredots	∞	\infty
¬	\neg, \lnot	⊥	\bot
⊖	\backneg, \invnot, \invneg	⊤	\top
⌞	\turnedneg, \turnednot	∠	\angle
⌟	\turnedbackneg	⊃	\revangle
△	\largetriangleup	∠	\measuredangle
▽	\largetriangleup	⊃	\revmeasuredangle,
∅	\emptyset, \diameter,		\measuredangleleft
	\varnothing	∠	\sphericalangle
∅	\reemptyset	∇	\sphericalangleup
○	\largecircle, \lgwhtcircle	▷	\sphericalangleleft,
●	\largeblackcircle		\revsphericalangle, \gtlpar
□	\largetriangleup	⋈	\sphericalangleup
■	\largeblacktriangleup,	⊥	\rightangle
	\lgblktriangleup	⊥	\measuredrightangle
◇	\smalllozenge, \smwhtlozenge	⊥	\rightanglesquare,
◆	\smallblacklozenge,		\rightanglesqr
	\smbklozenge	⊥	\measuredrightangledot,
◇	\medlozenge, \lozenge,		\rightanglemdot
	\mdlwhtlozenge,	′	\prime

\backprime	<code>\backprime</code>	\oslash	<code>\Game</code>
\checkmark	<code>\checkmark</code>	\complement	<code>\complement</code>
\lightning	<code>\lightning, \downzigzagarrow</code>	\flat	<code>\flat</code>
\diamondsuit	<code>\diamondsuit</code>	\natural	<code>\natural</code>
\blacklozenge	<code>\vardiamondsuit</code>	\sharp	<code>\sharp</code>
\heartsuit	<code>\heartsuit</code>	\aleph	<code>\aleph</code>
\blackheart	<code>\varheartsuit</code>	\beth	<code>\beth</code>
\spadesuit	<code>\spadesuit</code>	λ	<code>\gimel</code>
\clubsuit	<code>\clubsuit</code>	\daleth	<code>\daleth</code>
\maltese	<code>\maltese</code>	\wp	<code>\wp</code>
\starofdavid	<code>\starofdavid</code>	$/$	<code>/, \mathslash</code>
\sector	<code>\sector</code>	\backslash	<code>\backslash</code>
\forall	<code>\forall</code>	$ $	<code> , \vert</code>
\exists	<code>\exists</code>	$\ $	<code>\Vert</code>
\nexists	<code>\nexists</code>	$\ $	<code>\Vvert</code>
\Finv	<code>\Finv</code>		

4.2 Binary operators

\cdot	<code>\cdot</code>	\hookdownminus	<code>\hookdownminus</code>
\centerdot	<code>\centerdot</code>	\intprod	<code>\intprod, \minushookup</code>
\hdotdot	<code>\hdotdot</code>	\intprodr	<code>\intprodr, \hookupminus</code>
\vdots	<code>\vdots</code>	\times	<code>\leftthreetimes</code>
\cdot	<code>\udotdot</code>	\times	<code>\rightthreetimes</code>
\cdot	<code>\ddotdot</code>	\times	<code>\dtimes, \btimes</code>
$-$	<code>-, \minus</code>	\times	<code>\rtimes</code>
$/$	<code>\medslash, \smalldivslash</code>	\times	<code>\utimes, \ttimes</code>
\backslash	<code>\medbackslash, \smallsetminus</code>	\times	<code>\ltimes</code>
$+$	<code>+, \plus</code>	\times	<code>\lrtimes</code>
\times	<code>\times</code>	\times	<code>\upbowtie, \hourglass</code>
\pm	<code>\pm</code>	\times	<code>\rightY</code>
\mp	<code>\mp</code>	\times	<code>\upY</code>
$\dot{-}$	<code>\dotminus</code>	\times	<code>\leftY</code>
$\dot{-}$	<code>\minusdot</code>	\times	<code>\downY</code>
$\dot{-}$	<code>\minusfdots</code>	\wedge	<code>\wedge, \land</code>
$\dot{-}$	<code>\minusrdots</code>	\vee	<code>\vee, \lor</code>
$\dot{-}$	<code>\dotsminusdots</code>	\wedge	<code>\wedgedot</code>
$\dot{+}$	<code>\dotplus</code>	\vee	<code>\veedot</code>
\div	<code>\div</code>	$\underline{\vee}$	<code>\veebar</code>
\div	<code>\divideontimes</code>	$\overline{\wedge}$	<code>\barwedge</code>
\hookdownminus	<code>\hookdownminus</code>	$\underline{\vee}$	<code>\veedoublebar</code>

$\overline{\wedge}$	<code>\doublebarwedge</code>	∇	<code>\medtriangledown,</code> <code>\triangledown</code>
\mathbb{W}	<code>\doublewedge, \wedgeonwedge</code>	\blacktriangleright	<code>\medblacktriangleright,</code> <code>\blacktriangleright</code>
\mathbb{V}	<code>\doublevee, \veeonwee</code>	\blacktriangleup	<code>\medblacktriangleup,</code> <code>\blacktriangleup</code>
\curlywedge	<code>\curlywedge</code>	\blacktriangleleft	<code>\medblacktriangleleft,</code> <code>\blacktriangleleft</code>
\curlyvee	<code>\curlyvee</code>	\blacktriangledown	<code>\medblacktriangledown,</code> <code>\blacktriangledown</code>
\curlywedgedot	<code>\curlywedgedot</code>	\bigtriangleup	<code>\bigtriangleup</code>
\curlyveedot	<code>\curlyveedot</code>	\bigtriangledown	<code>\bigtriangledown</code>
\doublecurlywedge	<code>\doublecurlywedge</code>	\circ	<code>\smallcircle, \circ,</code> <code>\smwhtcircle</code>
\doublecurlyvee	<code>\doublecurlyvee</code>	\bullet	<code>\smallblackcircle, \bullet,</code> <code>\smbkcircle</code>
\cup	<code>\cup</code>	\bigcirc	<code>\medcircle, \mdlgwhtcircle,</code> <code>\mdwhtcircle</code>
\cap	<code>\cap</code>	\bullet	<code>\medblackcircle,</code> <code>\mdlgblkcircle, \mdblkcicle</code>
\cupcup	<code>\doublecup, \Cup</code>	\ominus	<code>\ominus</code>
\capcap	<code>\doublecap, \Cap</code>	\oslash	<code>\overt, \circledvert</code>
$\cup\dot{\cup}$	<code>\cupdot</code>	\oslash	<code>\oslash</code>
$\cap\dot{\cap}$	<code>\capdot</code>	\oslash	<code>\obackslash, \obslash</code>
\cupplus	<code>\cupplus, \uplus</code>	\oplus	<code>\oplus</code>
\capplus	<code>\capplus</code>	\otimes	<code>\otimes</code>
\sqcup	<code>\sqcup</code>	\odot	<code>\odot</code>
\sqcap	<code>\sqcap</code>	\odot	<code>\ocirc, \circledcirc</code>
\sqcupcup	<code>\doublesqcup, \Sqcup</code>	\odot	<code>\oast, \circledast</code>
\sqcapcap	<code>\doublesqcap, \Sqcap</code>	\odot	<code>\odash, \circleddash</code>
$\sqcup\dot{\cup}$	<code>\sqcupdot</code>	\odot	<code>\oequal, \circledequal</code>
$\sqcap\dot{\cap}$	<code>\sqcapdot</code>	\bigcirc	<code>\bigcirc</code>
\sqcupplus	<code>\sqcupplus</code>	\square	<code>\smallsquare, \smwhtsquare</code>
\sqcapplus	<code>\sqcapplus</code>	\blacksquare	<code>\smallblacksquare,</code> <code>\smbklsquare</code>
\pullback	<code>\pullback</code>	\square	<code>\medsquare, \square, \Box,</code> <code>\mdlgwhtsquare, \mdwhtsquare</code>
\pushout	<code>\pushout</code>	\blacksquare	<code>\medblacksquare,</code> <code>\mdlgblklsquare, \mdblksquare</code>
\smalltriangleright	<code>\smalltriangleright</code>	\boxminus	<code>\boxminus</code>
\smalltriangleup	<code>\smalltriangleup</code>	\boxplus	<code>\boxplus</code>
\smalltriangleleft	<code>\smalltriangleleft</code>		
\smalltriangledown	<code>\smalltriangledown</code>		
\smallblacktriangleright	<code>\smallblacktriangleright</code>		
\smallblacktriangleup	<code>\smallblacktriangleup</code>		
\smallblacktriangleleft	<code>\smallblacktriangleleft</code>		
\smallblacktriangledown	<code>\smallblacktriangledown</code>		
\medtriangleright	<code>\medtriangleright,</code> <code>\triangleright</code>		
\medtriangleup	<code>\medtriangleup, \triangle,</code> <code>\vartriangle</code>		
\medtriangleleft	<code>\medtriangleleft,</code> <code>\triangleleft</code>		

\boxslash	<code>\boxslash, \boxdiag</code>	\diamondbackslash	<code>\diamondbackslash,</code>
\boxbackslash	<code>\boxbackslash, \boxbslash</code>	\diamondbackslash	<code>\diamondbslash</code>
\boxplus	<code>\boxplus</code>	\diamondplus	<code>\diamondplus</code>
\boxtimes	<code>\boxtimes</code>	\diamondtimes	<code>\diamondtimes</code>
\boxdot	<code>\boxdot</code>	\diamonddot	<code>\diamonddot, \diamondcdot</code>
\boxbox	<code>\boxbox</code>	$\diamond\diamond$	<code>\diamond\diamond</code>
\smalllozenge	<code>\smalllozenge, \lozenge,</code>	\smallstar	<code>\smallstar, \smstar</code>
\smalllozenge	<code>\smalllozenge</code>	\smallstar	<code>\smallstar, \star</code>
\smallblacklozenge	<code>\smallblacklozenge,</code>	\medstar	<code>\medstar</code>
\smallblacklozenge	<code>\blacklozenge, \smlblacklozenge</code>	\star	<code>\star, \ast</code>
\medlozenge	<code>\medlozenge, \Diamond,</code>	\intercal	<code>\intercal</code>
\medlozenge	<code>\mdlgwhite, \mdwhite</code>	\wr	<code>\wreath, \wr</code>
\medblacklozenge	<code>\medblacklozenge,</code>	\amalg	<code>\amalg</code>
\medblacklozenge	<code>\mdlblacklozenge,</code>	\lhd	<code>\lhd</code>
\medblacklozenge	<code>\mdlblacklozenge</code>	\rhd	<code>\rhd</code>
\diamondminus	<code>\diamondminus</code>	\unlhd	<code>\unlhd</code>
\diamondvert	<code>\diamondvert</code>	\unrhd	<code>\unrhd</code>
\diamondslash	<code>\diamondslash</code>	\div	<code>\div, \div</code>
		\setminus	<code>\setminus</code>



4.3 Relations

$=$	<code>=, \equal, \Relbar</code>	\eqdot	<code>\eqdot</code>
\coloneqq	<code>\coloneq, \coloneqq</code>	\doteq	<code>\Doteq</code>
\equiv	<code>\equiv</code>	\fallingdotseq	<code>\fallingdotseq</code>
\sim	<code>\sim</code>	\risingdotseq	<code>\risingdotseq</code>
\backsimeq	<code>\backsimeq</code>	\smile	<code>\smile, \smallsmile</code>
\approx	<code>\approx</code>	\frown	<code>\frown, \smallfrown</code>
\triplesim	<code>\triplesim, \approxident</code>	\smilefrown	<code>\smilefrown, \asymp</code>
\simeq	<code>\simeq</code>	\frownsmile	<code>\frownsmile, \closure</code>
\backsimeq	<code>\backsimeq</code>	\smileeq	<code>\smileeq</code>
\eqsim	<code>\eqsim</code>	\frowneq	<code>\frowneq, \arceq</code>
\cong	<code>\cong</code>	\eqcirc	<code>\eqcirc</code>
\backcong	<code>\backcong</code>	\circeq	<code>\circeq</code>
\dotcong	<code>\dotcong</code>	\wedgedeq	<code>\wedgedeq, \hateq</code>
\approxeq	<code>\approxeq</code>	\veeeq	<code>\veeeq</code>
\bumpeq	<code>\bumpeq</code>	\stareq	<code>\stareq</code>
\bumpeq	<code>\bumpeq</code>	\triangleeq	<code>\triangleeq, \triangleeq</code>
\Bumpeq	<code>\Bumpeq</code>	\in	<code>\in</code>
\doteq	<code>\doteq</code>	\owns	<code>\owns, \ni</code>

$<$	<code><, \less</code>	\supset	<code>\supsetset</code>
$>$	<code>>, \gtr</code>	\sqsubseteq	<code>\subseteq</code>
\leq	<code>\leq, \le</code>	\supseteq	<code>\supseteq</code>
\geq	<code>\geq, \ge</code>	\sqsubseteq	<code>\subseteqq</code>
\leqslant	<code>\leqslant</code>	\supseteq	<code>\supseteqq</code>
\geqslant	<code>\geqslant</code>	\Subset	<code>\Subset</code>
\leqq	<code>\leqq</code>	\Supset	<code>\Supset</code>
\geqq	<code>\geqq</code>	$<$	<code>\prec</code>
\lesssim	<code>\lesssim</code>	$>$	<code>\succ</code>
\gtrsim	<code>\gtrsim</code>	\preceq	<code>\preceq</code>
\lessapprox	<code>\lessapprox</code>	\succeq	<code>\succeq</code>
\gtrapprox	<code>\gtrapprox</code>	\preccurlyeq	<code>\preccurlyeq</code>
\lessgtr	<code>\lessgtr</code>	\succcurlyeq	<code>\succcurlyeq</code>
\gtrless	<code>\gtrless</code>	\preceqq	<code>\preceqq</code>
\lesseqgtr	<code>\lesseqgtr</code>	\succeqq	<code>\succeqq</code>
\gtreqless	<code>\gtreqless</code>	\prec	<code>\prec</code>
\lesseqqgtr	<code>\lesseqqgtr</code>	\succsim	<code>\succsim</code>
\gtreqqless	<code>\gtreqqless</code>	\preccurlyeq	<code>\preccurlyeq</code>
\lesseqgtrslant	<code>\lesseqgtrslant</code>	\succcurlyeq	<code>\succcurlyeq</code>
\gtreqlessslant	<code>\gtreqlessslant</code>	\prec	<code>\prec</code>
\ll	<code>\ll</code>	\gtrdot	<code>\gtrdot</code>
\gg	<code>\gg</code>	\leqdot	<code>\leqdot</code>
\lll, \llless	<code>\lll, \llless</code>	\geqdot	<code>\geqdot</code>
\ggg, \gggtr	<code>\ggg, \gggtr</code>	\leqslantdot, \lesdot	<code>\leqslantdot, \lesdot</code>
$\lessclosed, \vartriangleleft$	<code>\lessclosed, \vartriangleleft</code>	\geqslantdot, \gesdot	<code>\geqslantdot, \gesdot</code>
$\gtrclosed, \vartriangleright$	<code>\gtrclosed, \vartriangleright</code>	\leqslantless	<code>\leqslantless</code>
$\leqclosed, \trianglelefteq$	<code>\leqclosed, \trianglelefteq</code>	\leqslantgtr	<code>\leqslantgtr</code>
$\geqclosed, \trianglerighteq$	<code>\geqclosed, \trianglerighteq</code>	\curlyeqprec	<code>\curlyeqprec</code>
\lesscc, \ltcc	<code>\lesscc, \ltcc</code>	\curlyeqsucc	<code>\curlyeqsucc</code>
\gtrcc, \gtcc	<code>\gtrcc, \gtcc</code>	\thicksim	<code>\thicksim</code>
\leqslcc, \lescc	<code>\leqslcc, \lescc</code>	\thickapprox	<code>\thickapprox</code>
\geqslcc, \gescc	<code>\geqslcc, \gescc</code>	\rightarrow	<code>\rightarrow, \to</code>
\sqsubset	<code>\sqsubset</code>	\uparrow	<code>\uparrow</code>
\sqsupset	<code>\sqsupset</code>	\leftarrow	<code>\leftarrow, \gets</code>
\sqsubseteq	<code>\sqsubseteq</code>	\downarrow	<code>\downarrow</code>
\sqsupseteq	<code>\sqsupseteq</code>	\nearrow	<code>\nearrow</code>
\sqsubseteqq	<code>\sqsubseteqq</code>	\nwarrow	<code>\nwarrow</code>
\sqsupseteqq	<code>\sqsupseteqq</code>	\swarrow	<code>\swarrow</code>
\Ssubset	<code>\Ssubset</code>	\searrow	<code>\searrow</code>
\Ssupset	<code>\Ssupset</code>	\Rightarrow	<code>\Rightarrow</code>
\subset	<code>\subset</code>	\Uparrow	<code>\Uparrow</code>



































































\Leftarrow	<code>\Leftarrow</code>	\hookleftarrow	<code>\hookleftarrow</code>
\Downarrow	<code>\Downarrow</code>	\hookdownarrow	<code>\hookdownarrow</code>
\nearrow	<code>\Nearrow</code>	\hooknearrow	<code>\hooknearrow</code>
\nwarrow	<code>\Nwarrow</code>	$\hooknwarrow, \hknnwarrow$	<code>\hooknwarrow, \hknnwarrow</code>
\swarrow	<code>\Swarrow</code>	\hookswarrow	<code>\hookswarrow</code>
\searrow	<code>\Searrow</code>	\hooksearrow, \hksearrow	<code>\hooksearrow, \hksearrow</code>
\leftrightarrow	<code>\leftrightharpoonup</code>	\rightharpoonup	<code>\rightharpoonup</code>
\updownarrow	<code>\updownarrow</code>	\upharpoonup	<code>\upharpoonup</code>
\nearrow	<code>\neswarrow</code>	\hookleftarrow	<code>\hookleftarrow</code>
\nwarrow	<code>\nwsearrow</code>	\hookdownarrow	<code>\hookdownarrow</code>
\Leftrightarrow	<code>\Leftrightarrow</code>	\hooknearrow, \hknearrow	<code>\hooknearrow, \hknearrow</code>
\Uparrow	<code>\Uparrow</code>	\hooknwarrow	<code>\hooknwarrow</code>
\nearrow	<code>\Neswarrow</code>	\hookswarrow, \hkswarrow	<code>\hookswarrow, \hkswarrow</code>
\nwarrow	<code>\Nwsearrow</code>	\hooksearrow	<code>\hooksearrow</code>
\rightarrow	<code>\twoheadrightarrow</code>	\rightarrow	<code>\rightarrow</code>
\uparrow	<code>\twoheaduparrow</code>	\upharpoonleft	<code>\upharpoonleft</code>
\leftarrow	<code>\twoheadleftarrow</code>	\leftharpoonup	<code>\leftharpoonup</code>
\downarrow	<code>\twoheaddownarrow</code>	\downharpoonright	<code>\downharpoonright</code>
\nearrow	<code>\twoheadnearrow</code>	\nearrow	<code>\nearrow</code>
\nwarrow	<code>\twoheadnwarrow</code>	\nwarrow	<code>\nwarrow</code>
\swarrow	<code>\twoheadswarrow</code>	\searrow	<code>\searrow</code>
\searrow	<code>\twoheadsearrow</code>	\swarrow	<code>\swarrow</code>
\rightarrowtail	<code>\rightarrowtail</code>	\searrow	<code>\searrow</code>
\uparrowtail	<code>\uparrowtail</code>	\rightarrow	<code>\rightarrow</code>
\leftarrowtail	<code>\leftarrowtail</code>	$\upharpoonright, \restriction$	<code>\upharpoonright, \restriction</code>
\downarrowtail	<code>\downarrowtail</code>	\leftharpoonup	<code>\leftharpoonup</code>
\nearrowtail	<code>\nearrowtail</code>	\downharpoonleft	<code>\downharpoonleft</code>
\nwarrowtail	<code>\nwarrowtail</code>	\nearrow	<code>\nearrow</code>
\swarrowtail	<code>\swarrowtail</code>	\nwarrow	<code>\nwarrow</code>
\searrowtail	<code>\searrowtail</code>	\searrow	<code>\searrow</code>
\mapsto	<code>\rightmapsto, \mapsto</code>	\swarrow	<code>\swarrow</code>
\upmapsto	<code>\upmapsto, \mapsto</code>	\searrow	<code>\searrow</code>
\leftmapsto	<code>\leftmapsto, \mapsto</code>	\rightarrow	<code>\rightarrow</code>
\downmapsto	<code>\downmapsto, \mapsto</code>	\updownharpoonleftright	<code>\updownharpoonleftright</code>
\nmapsto	<code>\nmapsto</code>	\nearrow	<code>\nearrow</code>
\nwmapsto	<code>\nwmapsto</code>	\nwarrow	<code>\nwarrow</code>
\swmapsto	<code>\swmapsto</code>	\searrow	<code>\searrow</code>
\semapsto	<code>\semapsto</code>	\swarrow	<code>\swarrow</code>
\hookrightarrow	<code>\hookrightarrow, \hookrightarrow</code>	\searrow	<code>\searrow</code>
\upharpoonup	<code>\upharpoonup</code>	\rightarrow	<code>\rightarrow</code>

\Updownarrow	<code>\updownharpoons,</code> <code>\updownharpoonsleftright</code>	\nwarrow	<code>\nwsearrows</code>
\nearrow	<code>\neswharpoons</code>	\Leftrightarrow	<code>\leftrightarrows</code>
\searrow	<code>\senwharpoons</code>	\Uparrow	<code>\downuparrows</code>
\Leftrightarrow	<code>\leftrightharpoons</code>	\swarrow	<code>\swnearrows</code>
\Downarrow	<code>\downupharpoons,</code> <code>\downupharpoonsleftright</code>	\searrow	<code>\senwarrows</code>
\swarrow	<code>\swneharpoons</code>	\rightsquigarrow	<code>\rightlsquigarrow,\leadsto,</code> <code>\rightsquigarrow</code>
\nwarrow	<code>\nwseharpoons</code>	\Uparrow	<code>\uplsquigarrow</code>
\rightarrow	<code>\rightbkarrow,\dashrightarrow,</code> <code>\dasharrow</code>	\curvearrowleft	<code>\leftlsquigarrow</code>
\uparrow	<code>\upbkarrow</code>	\Downarrow	<code>\downlsquigarrow</code>
\leftarrow	<code>\lefttbkarrow,\dashleftarrow</code>	\rightsquigarrow	<code>\rightrsquigarrow,</code> <code>\uprsquigarrow</code>
\downarrow	<code>\downbkarrow</code>	\curvearrowleft	<code>\leftrsquigarrow,</code> <code>\leftsquigarrow</code>
\nearrow	<code>\nebkarrow</code>	\Downarrow	<code>\downrsquigarrow</code>
\nwarrow	<code>\nwbkarrow</code>	\rightsquigarrow	<code>\leftrightsquigarrow</code>
\swarrow	<code>\swbkarrow</code>	\Updownarrow	<code>\updownsquigarrow</code>
\searrow	<code>\sebkarrow</code>	\rightsquigarrow	<code>\rightleftsquigarrow</code>
\rightarrow	<code>\rightspoon,\multimap</code>	\Updownarrow	<code>\downupsquigarrow</code>
\uparrow	<code>\upspoon,\circmid</code>	\rightsquigarrow	<code>\rightlcurvearrow,</code> <code>\curvearrowright</code>
\leftarrow	<code>\leftspoon,\multimapinv</code>	\Uparrow	<code>\uplcurvearrow</code>
\downarrow	<code>\downspoon,\midcir</code>	\rightsquigarrow	<code>\leftlcurvearrow</code>
\rightarrow	<code>\rightblackspoon</code>	\Downarrow	<code>\downlcurvearrow,</code> <code>\cwrightarcarrow</code>
\uparrow	<code>\upblackspoon</code>	\curvearrowright	<code>\nelcurvearrow</code>
\leftarrow	<code>\leftblackspoon</code>	\curvearrowright	<code>\nwlcurearrow</code>
\downarrow	<code>\downblackspoon</code>	\swarrow	<code>\swlcurearrow,</code> <code>\cwundercurvearrow</code>
\rightarrow	<code>\rightpitchfork</code>	\searrow	<code>\selcurvearrow</code>
\uparrow	<code>\uppitchfork,\pitchfork</code>	\rightsquigarrow	<code>\rightrcurearrow,</code> <code>\acwunderarcarrow</code>
\leftarrow	<code>\leftpitchfork</code>	\Uparrow	<code>\uprcurearrow</code>
Ψ	<code>\downpitchfork</code>	\curvearrowleft	<code>\leftrcurearrow,</code> <code>\curvearrowleft,</code> <code>\acwoverarcarrow</code>
\Rightarrow	<code>\rightrightarrows</code>	\Downarrow	<code>\downrcurearrow,</code> <code>\acwleftarcarrow</code>
\Uparrow	<code>\upuparrows</code>	\nearrow	<code>\nercurvearrow</code>
\Leftarrow	<code>\leftleftarrows</code>	\nwarrow	<code>\nwrcurearrow</code>
\Downarrow	<code>\downdownarrows</code>	\swarrow	<code>\swrcurearrow</code>
\nearrow	<code>\nenearrows</code>		
\nwarrow	<code>\nwnwarrows</code>		
\swarrow	<code>\swsearrows</code>		
\searrow	<code>\sesearrows</code>		
\rightleftarrows	<code>\rightleftarrows</code>		
\updownarrows	<code>\updownarrows</code>		
\neswarrows	<code>\neswarrows</code>		

	<code>\sercurvearrow,</code>		<code>\Longlefttrightarrow</code>
	<code>\ccwundercurvearrow</code>		<code>\longmapsto</code>
	<code>\leftrightcurvearrow</code>		<code>\emptyblackspoon, \origof</code>
	<code>\updowncurvearrow</code>		<code>\filledemptyspoon, \imageof</code>
	<code>\rightleftcurvearrow</code>		<code>\leftrightspoon, \dualmap</code>
	<code>\downupcurvearrow</code>		<code>\leftrightblackspoon</code>
	<code>\neswcurvearrow</code>		<code>\rightvdash, \vdash, \assert</code>
	<code>\nwsecurvearrow</code>		<code>\upvdash, \perp</code>
	<code>\swnecurvearrow</code>		<code>\leftvdash, \dashv</code>
	<code>\senwcurvearrow</code>		<code>\downvdash</code>
	<code>\leftfootline, \longdash</code>		<code>\rightvDash, \vDash, \models</code>
	<code>\rightfootline, \longdashv</code>		<code>\upvDash, \Vdash</code>
	<code>\acwcirclearrowup</code>		<code>\leftvDash, \Dashv</code>
	<code>\acwcirclearrowleft,</code>		<code>\downvDash, \barV</code>
	<code>\circlearrowleft,</code>		<code>\rightVdash, \Vdash</code>
	<code>\acwopencirclearrow</code>		<code>\upVdash</code>
	<code>\acwcirclearrowdown,</code>		<code>\leftVdash, \dashV</code>
	<code>\acwgapcirclearrow</code>		<code>\downVdash</code>
	<code>\acwcirclearrowright</code>		<code>\rightVdash, \VDash</code>
	<code>\cwcirclearrowdown,</code>		<code>\upVDash</code>
	<code>\cwgapcirclearrow</code>		<code>\leftVDash, \DashV</code>
	<code>\cwcirclearrowright,</code>		<code>\downVDash</code>
	<code>\circlearrowright,</code>		<code>\Vvdash</code>
	<code>\cwopencirclearrow</code>	\neq	<code>\nequal, \neq, \ne</code>
	<code>\cwcirclearrowup</code>	$\not\equiv$	<code>\nequiv</code>
	<code>\cwcirclearrowleft</code>	\sim	<code>\nsim</code>
\Rightarrow	<code>\Rrightarrow</code>	\backsimeq	<code>\nbacksim</code>
\Uparrow	<code>\Uparrow</code>	\approx	<code>\napprox</code>
\Leftarrow	<code>\Lleftarrow</code>	\tripleapprox	<code>\ntriplesim, \napproxident</code>
\Downarrow	<code>\Ddownarrow</code>	\simeq	<code>\nsimeq, \nsime</code>
\Lsh	<code>\Lsh</code>	\backsim	<code>\nbacksimeq</code>
\Rsh	<code>\Rsh</code>	\eqsim	<code>\neqsim</code>
\Ldsh	<code>\Ldsh</code>	\cong	<code>\ncong</code>
\Rdsh	<code>\Rdsh</code>	\backcong	<code>\nbackcong</code>
\looparrowright	<code>\looparrowright</code>	\approx	<code>\napproxeq</code>
\looparrowleft	<code>\looparrowleft</code>	\bumpeq	<code>\nbumpeq</code>
\rightarrow	<code>\longrightarrow</code>	\bumpeq	<code>\nbumpeq</code>
\leftarrow	<code>\longleftarrow</code>	\Bumpeq	<code>\nBumpeq</code>
\longleftrightarrow	<code>\longleftrightarrow</code>	\doteq	<code>\ndoteq</code>
\Rightarrow	<code>\Longrightarrow</code>	$\dot{=}$	<code>\neqdot</code>
\Leftarrow	<code>\Longleftarrow</code>	\doteq	<code>\Doteq</code>

\fallingdotseq	$\ngtrclosed, \ntrangleright$
\risingdotseq	$\nleqclosed, \ntrianglelefteq$
\smile	$\ngeqclosed, \ntranglerighteq$
\frown	\nlesscc, \nltcc
\smilefrown, \nasym	\ngtrcc, \ngtcc
\frownsmile, \nclosure	\nleqslcc, \nlescc
\smileeq	\ngeqslcc, \ngescc
\frowneq, \narceq	\nsqsubset
\neqcirc	\nsqsupset
\ncirceq	\nsqsubseteq
\nwedgeq, \nhateq	\nsqsupseteq
\veeeq	\nsqsubseteqq
\nstareq	\nsqsupseteqq
\ntriangleleeq	\nSsqsubset
\nin, \notin	\nSsqsupset
\nowns, \nni	\subset
\less	\supset
\ngtr	\subsetseteq
\nleq	\supsetseteq
\ngeq	\subsetseteqq
\nleqslant	\supsetseteqq
\ngeqslant	\nSubset
\nleqq	\nSupset
\ngeqq	\nprec
\nlesssim	\nsucc
\ngtrsim	\npreceq
\nlessapprox	\nsucceq
\ngtrapprox	\npreccurlyeq
\nlessgtr	\nsucccurlyeq
\ngtrless	\npreceqq
\nlesseqgtr	\nsucceqq
\ngtreqlless	\nprecsim
\nlesseqqgtr	\nsuccsim
\ngtreqqless	\nprecapprox
\nlesseqgtrslant	\nsuccapprox
\ngtreqllessslant	\nlessdot
\nll	\ngtrdot
\ngg	\nleqdot
\nlll	\ngeqdot
\nggg	\nleqslantdot, \nlesdot
$\nlessclosed, \ntriangleleft$	\ngeqslantdot, \ngesdot

\upharpoonleft	<code>\nlhookuparrow</code>	\leftrightharpoons	<code>\nrightleftharpoons</code>
\hookleftarrow	<code>\nlhookleftarrow</code>	\nrightarrow	<code>\nupdownharpoons,</code> <code>\nupdownharpoonsleftright</code>
\downarrow	<code>\nlhookdownarrow</code>	\nleftrightarrow	<code>\nneswharpoons</code>
\nearrow	<code>\nlhooknearrow</code>	\nrightarrow	<code>\nsenwharpoons</code>
\nwarrow	<code>\nlhooknwarrow, \nhknwarrow</code>	\leftrightharpoons	<code>\nlefttrightharpoons</code>
\searrow	<code>\nlhooksearrow</code>	\nrightarrow	<code>\ndownupharpoons,</code> <code>\ndownupharpoonsleftright</code>
\rightarrow	<code>\nrhookrightarrow</code>	\nrightarrow	<code>\nswneharpoons</code>
\uparrow	<code>\nrhookuparrow</code>	\nwarrow	<code>\nnwseharpoons</code>
\hookrightarrow	<code>\nrhookleftarrow,</code> <code>\nhookleftarrow</code>	\rightarrow	<code>\nrightbkarrow, \ndasharrow,</code> <code>\ndashrightarrow</code>
\downarrow	<code>\nrhookdownarrow</code>	\rightarrow	<code>\nupbkarrow</code>
\nearrow	<code>\nrhooknearrow, \nhknearrow</code>	\leftarrow	<code>\nleftbkarrow, \ndashleftarrow</code>
\nwarrow	<code>\nrhooknwarrow</code>	\downarrow	<code>\ndownbkarrow</code>
\searrow	<code>\nrhooksearrow</code>	\rightarrow	<code>\nnebkarrow</code>
\rightarrow	<code>\nrightharpoonup</code>	\nwarrow	<code>\nnwbkarrow</code>
\leftarrow	<code>\nupharpoonleft</code>	\nwarrow	<code>\nswbkarrow</code>
\rightarrow	<code>\nleftharpoondown</code>	\nwarrow	<code>\nsebkarrow</code>
\rightarrow	<code>\ndownharpoonright</code>	\rightarrow	<code>\nrightharpoonup, \nmultimap</code>
\nwarrow	<code>\nneharpoonnw</code>	\rightarrow	<code>\nupspoon, \ncirmid</code>
\nwarrow	<code>\nnwharpoonsw</code>	\rightarrow	<code>\nleftspoon, \nmultimapinv</code>
\nwarrow	<code>\nswharpoonse</code>	\rightarrow	<code>\ndownspoon, \nmidcir</code>
\nwarrow	<code>\nseharpoonne</code>	\rightarrow	<code>\nrightharpoonup</code>
\rightarrow	<code>\nrightharpoondown</code>	\rightarrow	<code>\nupblackspoon</code>
\rightarrow	<code>\nupharpoonright,</code> <code>\nrestriction</code>	\rightarrow	<code>\nleftblackspoon</code>
\rightarrow	<code>\nleftharpoonup</code>	\rightarrow	<code>\ndownblackspoon</code>
\rightarrow	<code>\ndownharpoonleft</code>	\rightarrow	<code>\nrightharpoonup</code>
\nwarrow	<code>\nneharpoonse</code>	\rightarrow	<code>\nuppitchfork, \npitchfork</code>
\nwarrow	<code>\nnwharpoonne</code>	\rightarrow	<code>\nleftpitchfork</code>
\nwarrow	<code>\nswharpoonnw</code>	\rightarrow	<code>\ndownpitchfork</code>
\nwarrow	<code>\nseharpoonsw</code>	\rightarrow	<code>\nrightrightarrows</code>
\rightarrow	<code>\nlefttrightharpoonupdown</code>	\rightarrow	<code>\nupuparrows</code>
\rightarrow	<code>\nupdownharpoonleftright</code>	\rightarrow	<code>\nleftleftarrows</code>
\nwarrow	<code>\nneswharpoonnwse</code>	\rightarrow	<code>\ndowndownarrows</code>
\nwarrow	<code>\nnwseharpoonnesw</code>	\rightarrow	<code>\nnenearrows</code>
\rightarrow	<code>\nlefttrightharpoondownup</code>	\rightarrow	<code>\nnwnwarrows</code>
\rightarrow	<code>\nupdownharpoonrightleft</code>	\rightarrow	<code>\nswswarrows</code>
\nwarrow	<code>\nneswharpoonsenw</code>	\rightarrow	<code>\nsesearrows</code>
\nwarrow	<code>\nnwseharpoonswne</code>	\rightarrow	<code>\nrightleftarrows</code>
		\rightarrow	<code>\nupdownarrows</code>

	<code>\nneswarrows</code>		<code>\nswrcurvearrow</code>
	<code>\nnwsearrows</code>		<code>\nsercurvearrow,</code>
	<code>\nleftrightharrows</code>		<code>\nccwundercurvearrow</code>
	<code>\ndownuparrows</code>		<code>\nleftrightcurvearrow</code>
	<code>\nswnearrows</code>		<code>\nupdowncurvearrow</code>
	<code>\nsenwarrows</code>		<code>\nrightrightcurvearrow</code>
	<code>\nrightrightsquigarrow, \nleadsto,</code>		<code>\ndownupcurvearrow</code>
	<code>\nrightrightsquigarrow</code>		<code>\nneswcurvearrow</code>
	<code>\nuplsquigarrow</code>		<code>\nnwsecurvearrow</code>
	<code>\nleftlsquigarrow</code>		<code>\nswnecurvearrow</code>
	<code>\ndownlsquigarrow</code>		<code>\nsenwcurvearrow</code>
	<code>\nrightrsquigarrow</code>		<code>\nleftfootline, \nlongdash</code>
	<code>\nuprsquigarrow</code>		<code>\nrightrightfootline, \nlongdashv</code>
	<code>\nlefttrsquigarrow,</code>		<code>\nacwcirclearrowup</code>
	<code>\nleftsquigarrow</code>		<code>\nacwcirclearrowleft,</code>
	<code>\ndownrsquigarrow</code>		<code>\ncirclearrowleft,</code>
	<code>\nleftrightsquigarrow</code>		<code>\nacwopencirclearrow</code>
	<code>\nupdownsquigarrow</code>		<code>\nacwcirclearrowdown,</code>
	<code>\nrightrightsquigarrow</code>		<code>\nacwgapcirclearrow</code>
	<code>\ndownupsquigarrow</code>		<code>\nacwcirclearrowright</code>
	<code>\nrightrightcurvearrow,</code>		<code>\ncwcirclearrowdown,</code>
	<code>\ncurvearrowright</code>		<code>\ncwgapcirclearrow</code>
	<code>\nuplcurvearrow</code>		<code>\ncwcirclearrowright,</code>
	<code>\nleftlcurvearrow</code>		<code>\ncirclearrowright,</code>
	<code>\ndownlcurvearrow,</code>		<code>\ncwopencirclearrow</code>
	<code>\ncwrightarcarrow</code>		<code>\ncwcirclearrowup</code>
	<code>\nnelcurvearrow</code>		<code>\ncwcirclearrowleft</code>
	<code>\nnwlccurvearrow</code>		<code>\nRrightarrow</code>
	<code>\nswlccurvearrow,</code>		<code>\nUuparrow</code>
	<code>\ncwundercurvearrow</code>		<code>\nLleftarrow</code>
	<code>\nselcurvearrow</code>		<code>\nDdownarrow</code>
	<code>\nrightrightcurvearrow,</code>		<code>\nrightrightvdash, \nvdash, \nassert</code>
	<code>\nacwunderarcarrow</code>		<code>\nupvdash, \nperp</code>
	<code>\nuprcurvearrow</code>		<code>\nleftvdash, \ndashv</code>
	<code>\nleftlcurvearrow,</code>		<code>\ndownvdash</code>
	<code>\ncurvearrowleft,</code>		<code>\nrightrightvDash, \nvDash, \nmodels</code>
	<code>\nacwoverarcarrow</code>		<code>\nupvDash, \nVbar</code>
	<code>\ndownrcurvearrow,</code>		<code>\nleftvDash, \nDashv</code>
	<code>\nacwleftarcarrow</code>		<code>\ndownvDash, \nbarV</code>
	<code>\ninnercurvearrow</code>		<code>\nrightrightVdash, \nVdash</code>
	<code>\nnwrcurvearrow</code>		<code>\nupVdash</code>

\nleftVDash	\nleftVDash	\backpropto	\backpropto
\ndashV	\ndashV	\propfrom	\propfrom
\nrightVDash	\nrightVDash	\crossing	\crossing
\nupVDash	\nupVDash	\between	\between
\nleftVDash	\nleftVDash	\separated	\separated
\ndashV	\ndashV	\shortmid	\shortmid
\nrightVDash	\nrightVDash	\mid	\mid
\mathratio	\mathratio	\divides	\divides
\Colon	\Colon	\nshortmid	\nshortmid
\relbar	\relbar	\nmid	\nmid
\rJoin	\rJoin	\individes	\individes
\lJoin	\lJoin	\shortparallel	\shortparallel
\bowtie	\bowtie	\parallel	\parallel
\propto	\propto	\nshortparallel	\nshortparallel
\varpropto	\varpropto	\nparallel	\nparallel

4.4 Punctuation symbols

\cdot	\cdot	\colon	\colon
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4.5 Large operators

\bigplus	\bigplus	\bigcap	\bigcap
\bigtimes	\bigtimes	\bigcup	\bigcup
\bigwedge	\bigwedge	\bigsqcap	\bigsqcap
\bigvee	\bigvee	\bigsqcup	\bigsqcup
\bigwedgedot	\bigwedgedot	\bigsqcapdot	\bigsqcapdot
\bigveedot	\bigveedot	\bigsqcupdot	\bigsqcupdot
\bigdoublewedge	\bigdoublewedge	\bigsqcapplus	\bigsqcapplus
\bigdoublevee	\bigdoublevee	\bigsqcupplus	\bigsqcupplus
\bigcurlywedge	\bigcurlywedge	\bigoplus	\bigoplus
\bigcurlyvee	\bigcurlyvee	\bigotimes	\bigotimes
\bigcurlywedgedot	\bigcurlywedgedot	\bigodot	\bigodot
\bigcurlyveedot	\bigcurlyveedot	\bigcircast	\bigcircast
\bigdoublecurlywedge	\bigdoublecurlywedge	\prod	\prod
\bigdoublecurlyvee	\bigdoublecurlyvee	\coprod	\coprod
\bigcap	\bigcap	\sum	\sum
\bigcup	\bigcup	\osum	\osum
\bigcapdot	\bigcapdot	\int	\int
\bigcupdot	\bigcupdot	\iint	\iint

$\int\int\int$	$\int\int\int$	<code>\iiint</code>	$\oint\oint\oint$	$\oint\oint\oint$	<code>\oiint</code>
$\int\int\int\int$	$\int\int\int\int$	<code>\iiiiint</code>	\oint	\oint	<code>\rcirclerightint,</code> <code>\ointctrclockwise</code>
$\int\cdots\int$	$\int\cdots\int$	<code>\idotsint, \dotsint</code>	\oint	\oint	<code>\lrcirclerightint,</code> <code>\varointclockwise</code>
\int	\int	<code>\landupint, \intclockwise</code>	\oint	\oint	<code>\rcircleleftint,</code> <code>\varointctrclockwise</code>
\int	\int	<code>\landdownint, \awint,</code> <code>\intctrclockwise</code>	\oint	\oint	<code>\lcircleleftint,</code> <code>\ointclockwise</code>
\int	\int	<code>\intbar</code>	\int	\int	<code>\sumint</code>
\int	\int	<code>\intBar</code>	\prod	\prod	<code>\smallprod</code>
\int	\int	<code>\fint</code>	\coprod	\coprod	<code>\smallcoprod</code>
\oint	\oint	<code>\oint</code>	\int	\int	<code>\smallint</code>
\oint	\oint	<code>\oiint</code>	$\sqrt{\quad}$	$\sqrt{\quad}$	<code>\surd</code>

4.6 Delimiters and accents

$((((($	<code>(, \lparen</code>	\ulcorner	<code>\lrcorner</code>
$))))$	<code>), \rparen</code>	\urcorner	<code>\ullcorner</code>
$[[[[[$	<code>[, \lbrack</code>	\llcorner	<code>\ulrcorner</code>
$]]]]]$	<code>], \rbrack</code>	\lrcorner	<code>\lsem, \lBrack</code>
$\lfloor\lfloor\lfloor$	<code>\lfloor</code>	\rrcorner	<code>\rsem, \rBrack</code>
$\rfloor\rfloor\rfloor$	<code>\rfloor</code>	$\{ \{ \{ \{$	<code>\lbrace, \{</code>
$\lceil\lceil\lceil$	<code>\lceil</code>	$\} \} \} \}$	<code>\rbrace, \}</code>
$\rceil\rceil\rceil$	<code>\rceil</code>	$\langle \langle \langle \langle$	<code>\langle</code>
\ulcorner	<code>\ulcorner</code>	$\rangle \rangle \rangle \rangle$	<code>\rangle</code>
\urcorner	<code>\urcorner</code>	\llcorner	<code>\lAngle</code>
\llcorner	<code>\llcorner</code>	\rrcorner	<code>\rAngle</code>

$\langle\langle\langle\langle$	<code>\langedot</code>	$\uparrow\uparrow\uparrow$	<code>\arrowvert</code>
$\rangle\rangle\rangle\rangle$	<code>\rangledot</code>	$\Uparrow\Uparrow\Uparrow$	<code>\Arrowvert</code>
$///\backslash$	<code>/,\mathslash</code>	$\left[\left[\left[\right.$	<code>\lgroup</code>
$\backslash\backslash\backslash$	<code>\backslashslash</code>	$\right)\right)\right]$	<code>\rgroup</code>
$\updownarrow\updownarrow$	<code>\lvert,\vert</code>	$\int\int\int\int$	<code>\lmoustache</code>
$\updownarrow\updownarrow$	<code>\lvert</code>	$\int\int\int\int$	<code>\rmoustache</code>
$\updownarrow\updownarrow$	<code>\rvert</code>	$\updownarrow\updownarrow$	<code>\bracevert</code>
$\updownarrow\updownarrow$	<code>\Vert,\ </code>	$\uparrow\uparrow\uparrow\uparrow$	<code>\uparrowarrow</code>
$\updownarrow\updownarrow$	<code>\lVert</code>	$\downarrow\downarrow\downarrow\downarrow$	<code>\downarrowarrow</code>
$\updownarrow\updownarrow$	<code>\rVert</code>	$\updownarrow\updownarrow\updownarrow\updownarrow$	<code>\updownarrowarrow</code>
$\updownarrow\updownarrow$	<code>\Vvert</code>	$\uparrow\uparrow\uparrow\uparrow$	<code>\Uparrow</code>
$\updownarrow\updownarrow$	<code>\lVvert</code>	$\downarrow\downarrow\downarrow\downarrow$	<code>\Downarrow</code>
$\updownarrow\updownarrow$	<code>\rVvert</code>	$\updownarrow\updownarrow\updownarrow\updownarrow$	<code>\Updownarrow</code>
\overbrace{xxx}	<code>\overbrace</code>	\overline{xxx}	<code>\overline{xxx}</code>
\underbrace{xxx}	<code>\underbrace</code>	\overleftarrow{xxx}	<code>\overleftarrow{xxx}</code>
\overgroup{xxx}	<code>\overgroup</code>	\overrightarrow{xxx}	<code>\overrightarrow{xxx}</code>
\undergroup{xxx}	<code>\undergroup</code>	\underline{xxx}	<code>\underline{xxx}</code>
\sqrt{b}	<code>\sqrt{b}</code>	\vec{b}	<code>\vec{b}</code>
\widehat{xxx}	<code>\widehat{xxx}</code>	\bar{b}	<code>\middlebar</code>
\widetilde{xxx}	<code>\widetilde{xxx}</code>	$\text{\textit{b}}$	<code>\middleslash</code>
\widetilde{xxx}	<code>\widetilde{xxx}</code>	$\text{\textit{b}}$	<code>\stroketrough</code>

4.7 Faked symbols

The following symbols are taken from the text font or another math font (in case of `\Re` and `\Im`).

†	\dagger	ℜ	\Re
‡	\ddagger	ℑ	\Im
¶	\mathparagraph	ℏ	\hbar
§	\mathsection	ℎ	\hslash
\$	\mathdollar	®	\circledR
£	\mathsterling	©	\circledS
¥	\yen		

4.8 Missing symbols

The following symbols from Computer Modern or the AMS fonts are missing in FdSymbol. If available, they should be taken from the text font.

\mho	\varkappa	\lhook
\nabla	\Bbbk	\rhook
\eth	\backepsilon	\diagup
\digamma	\mapstochar	\diagdown

5 Implementation

```
1 ⟨*style⟩
2 \RequirePackage{xkeyval}
```

We use xkeyval’s key mechanism to declare all options. The first options determines the size of delimiters.

```
3 \define@boolkey{fdsymbol.sty}[fdsy@]{largedelims}[true]{}{}
```

The next option allows to scale the fonts by an arbitrary factor.

```
4 \newcommand{\fdsy@scale}{1.0}
5 \define@key{fdsymbol.sty}{scale}{\renewcommand{\fdsy@scale}{#1}}
```

The following two options control which weights are used for which math version and font size.

```
6 \newcommand{\fdsy@mweight}{Book}
7 \newcommand{\fdsy@msweight}{Book}
8 \newcommand{\fdsy@bweight}{Medium}
9 \newcommand{\fdsy@bsweight}{Medium}
10 \define@choicekey*{fdsymbol.sty}{normalweight}[\@tempa\@tempb]{book,regular,auto}{%
11   \ifcase\@tempb\relax
12     \renewcommand{\fdsy@mweight}{Book}
13     \renewcommand{\fdsy@msweight}{Book}
14   \or
15     \renewcommand{\fdsy@mweight}{Regular}
16     \renewcommand{\fdsy@msweight}{Regular}
17   \or
```

```

18 \renewcommand\fdsy@weight{Book}
19 \renewcommand\fdsy@msweight{Regular}
20 \fi
21 }
22 \define@choicekey*{fdsymbol.sty}{boldweight}[\@tempa\@tempb]{medium,bold,auto}{%
23 \ifcase\@tempb\relax
24 \renewcommand\fdsy@bweight{Medium}
25 \renewcommand\fdsy@bsweight{Medium}
26 \or
27 \renewcommand\fdsy@bweight{Bold}
28 \renewcommand\fdsy@bsweight{Bold}
29 \or
30 \renewcommand\fdsy@bweight{Medium}
31 \renewcommand\fdsy@bsweight{Bold}
32 \fi
33 }
34
35 \ExecuteOptionsX{largedelims=false}
36 \ProcessOptionsX

```

Load external packages, but only if they are not already loaded in order to avoid warning messages about loading a package twice with different options.

```

37 \ifpackageloaded{amsmath}{}{\RequirePackage{amsmath}}
38 \ifpackageloaded{textcomp}{}{\RequirePackage{textcomp}}
39 \ifundefined{mathfrak}{}{\RequirePackage{eufrak}}{}

```

If the option `largedelims` has been selected, we readjust the scaling factors of big delimiters, so that `\Big`, `\bigg` and `\Bigg` do not change their size.

```

40 \iffdsy@largedelims
41 \renewcommand{\Big}{\bBigg@{1.25}}
42 \renewcommand{\bigg}{\bBigg@{1.66}}
43 \renewcommand{\Bigg}{\bBigg@{2.08}}
44 \fi

```

Some symbols missing from `FdSymbol` can be obtained from other fonts or by combining several other symbols.

```

45 \DeclareRobustCommand{\dagger}{\fdsy@text{\textdagger}}
46 \DeclareRobustCommand{\ddagger}{\fdsy@text{\textdaggerdbl}}
47 \DeclareRobustCommand{\mathparagraph}{\fdsy@text{\textparagraph}}
48 \DeclareRobustCommand{\mathsection}{\fdsy@text{\textsection}}
49 \DeclareRobustCommand{\mathdollar}{\fdsy@text{\textdollar}}
50 \DeclareRobustCommand{\mathsterling}{\fdsy@text{\textsterling}}
51 \DeclareRobustCommand{\yen}{\fdsy@text{\textyen}}
52 \DeclareRobustCommand{\circledR}{\fdsy@text{\textcircled{%
53 \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont R}}}
54 \DeclareRobustCommand{\circledS}{\fdsy@text{\textcircled{%
55 \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont S}}}

```

```

56 \DeclareRobustCommand{\Re}{\mathfrak{R}}
57 \DeclareRobustCommand{\Im}{\mathfrak{I}}
58 \DeclareRobustCommand{\dotplus}{\mathbin{\dot{+}}}
59 \DeclareRobustCommand{\dotcong}{\mathrel{\dot{\cong}}}
60 \DeclareRobustCommand{\thicksim}{\mathrel{\text{\boldmath$\mathchar"2127$}}}
61 \DeclareRobustCommand{\thickapprox}{\mathrel{\text{\boldmath$\mathchar"223F$}}}
62 \let\hbar\undefined
63 \let\hslash\undefined
64 \DeclareRobustCommand{\hbar}{\middlebar h}
65 \DeclareRobustCommand{\hslash}{\middleslash h}
66 \DeclareRobustCommand{\veebar}{\mathbin{\underline{\vee}}}
67 \DeclareRobustCommand{\barwedge}{\mathbin{\overline{\wedge}}}
68 \DeclareRobustCommand{\veedoublebar}{\mathbin{\underline{\underline{\vee}}}}
69 \DeclareRobustCommand{\doublebarwedge}{\mathbin{\overline{\overline{\wedge}}}}
70 \DeclareRobustCommand{\centerdot}{\mathbin{\rule{0.15em}{0.15em}}}
71 \DeclareRobustCommand{\divideontimes}{\mathbin{\ooalign{$\div$\cr$\times$}}}

```

Unneeded partial symbols.

```

72 \let\mapstochar\undefined
73 \let\lhook\undefined
74 \let\rhook\undefined

```

Shorthands to simplify the definitions below.

```

75 \newcommand\fdsy@setslot[1]{\@tempcnta #1\relax}
76 \newcommand\fdsy@nextslot{\advance\@tempcnta 1\relax}
77 \newcommand\fdsy@prevslot{\advance\@tempcnta -1\relax}
78
79 \newcommand\fdsy@DeclareSymbol[4]{\DeclareMathSymbol{#2}{#3}{#4}{#1}}
80 \newcommand\fdsy@DeclareSymbol[3]{%
81   \if\relax\noexpand#1\let#1\undefined\fi
82   \expandafter\fdsy@DeclareSymbol\expandafter{\the\@tempcnta}{#1}{#3}{#2}%
83   \fdsy@nextslot
84 }
85 \newcommand\fdsy@DeclareAlias[3]{\fdsy@prevslot\fdsy@DeclareSymbol{#1}{#2}{#3}}
86 \newcommand\fdsy@DeclareOperator[3]{\def#1{\DOTSB#3\limits@}}
87 \newcommand\fdsy@DeclareIntegral[3]{\def#1{\DOTSI#3\limits@}}
88 \newcommand\fdsy@DeclareDelimiter[4]{%
89   \if\relax\noexpand#1\let#1\undefined\fi
90   \DeclareMathDelimiter{#1}{#2}{#3}{#4}{#3}{#4}%
91 }
92 \newcommand\fdsy@DeclareOpen[3]{\fdsy@DeclareDelimiter{#1}{\mathopen}{#2}{#3}}
93 \newcommand\fdsy@DeclareClose[3]{\fdsy@DeclareDelimiter{#1}{\mathclose}{#2}{#3}}

```

Font definitions.

```

94 \DeclareFontFamily{U}{FdSymbolA}{}
95 \DeclareFontFamily{U}{FdSymbolB}{}
96 \DeclareFontFamily{U}{FdSymbolC}{}

```

```

97 \DeclareFontFamily{U}{FdSymbolD}{}
98 \DeclareFontFamily{U}{FdSymbolE}{}
99 \DeclareFontFamily{U}{FdSymbolF}{}
100
101 \DeclareFontShape{U}{FdSymbolA}{m}{n}{
102     <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@msweight
103     <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@mweight
104 }{}
105 \DeclareFontShape{U}{FdSymbolA}{b}{n}{
106     <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@bsweight
107     <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@bweight
108 }{}
109 \DeclareFontShape{U}{FdSymbolB}{m}{n}{
110     <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@msweight
111     <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@mweight
112 }{}
113 \DeclareFontShape{U}{FdSymbolB}{b}{n}{
114     <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@bsweight
115     <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@bweight
116 }{}
117 \DeclareFontShape{U}{FdSymbolC}{m}{n}{
118     <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@msweight
119     <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@mweight
120 }{}
121 \DeclareFontShape{U}{FdSymbolC}{b}{n}{
122     <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@bsweight
123     <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@bweight
124 }{}
125 \DeclareFontShape{U}{FdSymbolD}{m}{n}{
126     <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@msweight
127     <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@mweight
128 }{}
129 \DeclareFontShape{U}{FdSymbolD}{b}{n}{
130     <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@bsweight
131     <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@bweight
132 }{}
133 \DeclareFontShape{U}{FdSymbolE}{m}{n}{
134     <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@msweight
135     <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@mweight
136 }{}
137 \DeclareFontShape{U}{FdSymbolE}{b}{n}{
138     <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@bsweight
139     <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@bweight
140 }{}
141 \DeclareFontShape{U}{FdSymbolF}{m}{n}{

```

```

142 <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@msweight
143 <-7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@mweight
144 {}{}
145 \DeclareFontShape{U}{FdSymbolF}{b}{n}{
146 <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@bsweight
147 <-7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@bweight
148 {}{}
149
150 \DeclareSymbolFont{symbols}{U}{FdSymbolA}{m}{n}
151 \DeclareSymbolFont{relations}{U}{FdSymbolB}{m}{n}
152 \DeclareSymbolFont{arrows}{U}{FdSymbolC}{m}{n}
153 \DeclareSymbolFont{narrows}{U}{FdSymbolD}{m}{n}
154 \DeclareSymbolFont{largesymbols}{U}{FdSymbolE}{m}{n}
155 \DeclareSymbolFont{delimiters}{U}{FdSymbolF}{m}{n}
156 \SetSymbolFont{symbols}{bold}{U}{FdSymbolA}{b}{n}
157 \SetSymbolFont{relations}{bold}{U}{FdSymbolB}{b}{n}
158 \SetSymbolFont{arrows}{bold}{U}{FdSymbolC}{b}{n}
159 \SetSymbolFont{narrows}{bold}{U}{FdSymbolD}{b}{n}
160 \SetSymbolFont{largesymbols}{bold}{U}{FdSymbolE}{b}{n}
161 \SetSymbolFont{delimiters}{bold}{U}{FdSymbolF}{b}{n}

At the moment, we still use cmsy for the calligraphic alphabet.
162 \DeclareMathAlphabet{\mathcal}{OMS}{cmsy}{m}{n}
163 \SetMathAlphabet{\mathcal}{bold}{OMS}{cmsy}{b}{n}

A command to take math symbols from text fonts.
164 \newcommand\fdsy@bold{bold}
165 \newcommand\fdsy@text[1]{%
166 \ifx\fdsy@bold\math@version
167 \text{\bfseries#1}%
168 \else
169 \text{\mdseries#1}%
170 \fi
171 }

FdSymbolA: binary operators and ordinary symbols
172 \fdsy@setslot{0}
173 \fdsy@DeclareSymbol{\cdot}{symbols}{\mathbin}
174 \fdsy@DeclareAlias{\cdotp}{symbols}{\mathpunct}
175 \fdsy@DeclareSymbol{\hdotdot}{symbols}{\mathbin}
176 \fdsy@DeclareSymbol{\vdotdot}{symbols}{\mathbin}
177 \fdsy@DeclareAlias{\colon}{symbols}{\mathpunct}
178 \fdsy@DeclareAlias{\mathcolon}{symbols}{\mathpunct}
179 \fdsy@DeclareAlias{\mathratio}{symbols}{\mathrel}
180 \fdsy@DeclareSymbol{\udotdot}{symbols}{\mathbin}
181 \fdsy@DeclareSymbol{\ddotdot}{symbols}{\mathbin}
182 \fdsy@DeclareSymbol{\hdots}{symbols}{\mathord}

```

```

183 \fdsy@DeclareAlias{\@cdots}{symbols}{\mathinner}
184 \let\cdots\@cdots
185 \fdsy@DeclareSymbol{\@vdots}{symbols}{\mathord}
186 \DeclareRobustCommand{\vdots}{\ifmmode\@vdots\else\hbox{$\@vdots$}\fi}
187 \fdsy@DeclareSymbol{\udots}{symbols}{\mathord}
188 \fdsy@DeclareAlias{\adots}{symbols}{\mathord}
189 \fdsy@DeclareSymbol{\ddots}{symbols}{\mathord}
190 \fdsy@DeclareSymbol{\righttherefore}{symbols}{\mathord}
191 \fdsy@DeclareSymbol{\uptherefore}{symbols}{\mathord}
192 \fdsy@DeclareAlias{\therefore}{symbols}{\mathord}
193 \fdsy@DeclareSymbol{\lefttherefore}{symbols}{\mathord}
194 \fdsy@DeclareSymbol{\downtherefore}{symbols}{\mathord}
195 \fdsy@DeclareAlias{\because}{symbols}{\mathord}
196 \fdsy@DeclareSymbol{\squaredots}{symbols}{\mathord}
197 \fdsy@DeclareAlias{\Colon}{symbols}{\mathrel}
198 \fdsy@DeclareSymbol{\minus}{symbols}{\mathbin}
199 \fdsy@DeclareSymbol{\medslash}{symbols}{\mathbin}
200 \fdsy@DeclareAlias{\smalldivslash}{symbols}{\mathbin}
201 \fdsy@DeclareSymbol{\medbackslash}{symbols}{\mathbin}
202 \fdsy@DeclareAlias{\smallsetminus}{symbols}{\mathbin}
203 \fdsy@DeclareSymbol{\plus}{symbols}{\mathbin}
204 \fdsy@DeclareSymbol{\times}{symbols}{\mathbin}
205 \fdsy@DeclareSymbol{\pm}{symbols}{\mathbin}
206 \fdsy@DeclareSymbol{\mp}{symbols}{\mathbin}
207 \fdsy@DeclareSymbol{\dotminus}{symbols}{\mathbin}
208 \fdsy@DeclareSymbol{\minusdot}{symbols}{\mathbin}
209 \fdsy@DeclareSymbol{\minusfdots}{symbols}{\mathbin}
210 \fdsy@DeclareSymbol{\minusrdots}{symbols}{\mathbin}
211 \fdsy@DeclareSymbol{\dotminusdots}{symbols}{\mathbin}
212 \fdsy@DeclareSymbol{\div}{symbols}{\mathbin}
213 \fdsy@DeclareSymbol{\neg}{symbols}{\mathord}
214 \fdsy@DeclareAlias{\lnot}{symbols}{\mathord}
215 \fdsy@DeclareAlias{\minushookdown}{symbols}{\mathbin}
216 \fdsy@DeclareSymbol{\backneg}{symbols}{\mathord}
217 \fdsy@DeclareAlias{\hookdownminus}{symbols}{\mathbin}
218 \fdsy@DeclareAlias{\invneg}{symbols}{\mathord}
219 \fdsy@DeclareAlias{\invnot}{symbols}{\mathord}
220 \fdsy@DeclareSymbol{\intprod}{symbols}{\mathbin}
221 \fdsy@DeclareAlias{\minushookup}{symbols}{\mathbin}
222 \fdsy@DeclareAlias{\turnedneg}{symbols}{\mathord}
223 \fdsy@DeclareAlias{\turnednot}{symbols}{\mathord}
224 \fdsy@DeclareSymbol{\intprodr}{symbols}{\mathbin}
225 \fdsy@DeclareAlias{\hookupminus}{symbols}{\mathbin}
226 \fdsy@DeclareAlias{\turnedbackneg}{symbols}{\mathord}
227 \fdsy@DeclareSymbol{\leftthreetimes}{symbols}{\mathbin}

```

```

228 \fdsy@DeclareSymbol{\rightthreetimes}{symbols}{\mathbin}
229 \fdsy@DeclareSymbol{\dttimes}{symbols}{\mathbin}
230 \fdsy@DeclareAlias{\btimes}{symbols}{\mathbin}
231 \fdsy@DeclareSymbol{\rtimes}{symbols}{\mathbin}
232 \fdsy@DeclareAlias{\rJoin}{symbols}{\mathrel}
233 \fdsy@DeclareSymbol{\utimes}{symbols}{\mathbin}
234 \fdsy@DeclareAlias{\ttimes}{symbols}{\mathbin}
235 \fdsy@DeclareSymbol{\ltimes}{symbols}{\mathbin}
236 \fdsy@DeclareAlias{\lJoin}{symbols}{\mathrel}
237 \fdsy@DeclareSymbol{\bowtie}{symbols}{\mathrel}
238 \fdsy@DeclareAlias{\Join}{symbols}{\mathrel}
239 \fdsy@DeclareAlias{\lrtimes}{symbols}{\mathbin}
240 \fdsy@DeclareSymbol{\upbowtie}{symbols}{\mathbin}
241 \fdsy@DeclareAlias{\hourglass}{symbols}{\mathbin}
242 \fdsy@DeclareSymbol{\rightY}{symbols}{\mathbin}
243 \fdsy@DeclareSymbol{\upY}{symbols}{\mathbin}
244 \fdsy@DeclareSymbol{\leftY}{symbols}{\mathbin}
245 \fdsy@DeclareSymbol{\downY}{symbols}{\mathbin}
246 \fdsy@DeclareSymbol{\wedge}{symbols}{\mathbin}
247 \fdsy@DeclareAlias{\land}{symbols}{\mathbin}
248 \fdsy@DeclareSymbol{\vee}{symbols}{\mathbin}
249 \fdsy@DeclareAlias{\lor}{symbols}{\mathbin}
250 \fdsy@DeclareSymbol{\wedgedot}{symbols}{\mathbin}
251 \fdsy@DeclareSymbol{\veedot}{symbols}{\mathbin}
252 \fdsy@DeclareSymbol{\doublewedge}{symbols}{\mathbin}
253 \fdsy@DeclareAlias{\wedgeonwedge}{symbols}{\mathbin}
254 \fdsy@DeclareSymbol{\doublevee}{symbols}{\mathbin}
255 \fdsy@DeclareAlias{\veeonvee}{symbols}{\mathbin}
256 \fdsy@DeclareSymbol{\curlywedge}{symbols}{\mathbin}
257 \fdsy@DeclareSymbol{\curlyvee}{symbols}{\mathbin}
258 \fdsy@DeclareSymbol{\curlywedgedot}{symbols}{\mathbin}
259 \fdsy@DeclareSymbol{\curlyveedot}{symbols}{\mathbin}
260 \fdsy@DeclareSymbol{\doublecurlywedge}{symbols}{\mathbin}
261 \fdsy@DeclareSymbol{\doublecurlyvee}{symbols}{\mathbin}
262 \fdsy@DeclareSymbol{\cup}{symbols}{\mathbin}
263 \fdsy@DeclareSymbol{\cap}{symbols}{\mathbin}
264 \fdsy@DeclareSymbol{\doublecup}{symbols}{\mathbin}
265 \fdsy@DeclareAlias{\Cup}{symbols}{\mathbin}
266 \fdsy@DeclareSymbol{\doublecap}{symbols}{\mathbin}
267 \fdsy@DeclareAlias{\Cap}{symbols}{\mathbin}
268 \fdsy@DeclareSymbol{\cupdot}{symbols}{\mathbin}
269 \fdsy@DeclareSymbol{\capdot}{symbols}{\mathbin}
270 \fdsy@DeclareSymbol{\cupplus}{symbols}{\mathbin}
271 \fdsy@DeclareAlias{\uplus}{symbols}{\mathbin}
272 \fdsy@DeclareSymbol{\capplus}{symbols}{\mathbin}

```



```

273 \fdsy@DeclareSymbol{\sqcup}{symbols}{\mathbin}
274 \fdsy@DeclareSymbol{\sqcap}{symbols}{\mathbin}
275 \fdsy@DeclareSymbol{\doublesqcup}{symbols}{\mathbin}
276 \fdsy@DeclareAlias{\Sqcup}{symbols}{\mathbin}
277 \fdsy@DeclareSymbol{\doublesqcap}{symbols}{\mathbin}
278 \fdsy@DeclareAlias{\Sqcap}{symbols}{\mathbin}
279 \fdsy@DeclareSymbol{\sqcupdot}{symbols}{\mathbin}
280 \fdsy@DeclareSymbol{\sqcapdot}{symbols}{\mathbin}
281 \fdsy@DeclareSymbol{\sqcupplus}{symbols}{\mathbin}
282 \fdsy@DeclareSymbol{\sqcapplus}{symbols}{\mathbin}
283 \fdsy@DeclareSymbol{\pullback}{symbols}{\mathbin}
284 \fdsy@DeclareSymbol{\pushout}{symbols}{\mathbin}
285 \fdsy@DeclareSymbol{\smalltriangleright}{symbols}{\mathbin}
286 \fdsy@DeclareSymbol{\smalltriangleup}{symbols}{\mathbin}
287 \fdsy@DeclareSymbol{\smalltriangleleft}{symbols}{\mathbin}
288 \fdsy@DeclareSymbol{\smalltriangledown}{symbols}{\mathbin}
289 \fdsy@DeclareSymbol{\smallblacktriangleright}{symbols}{\mathbin}
290 \fdsy@DeclareSymbol{\smallblacktriangleup}{symbols}{\mathbin}
291 \fdsy@DeclareSymbol{\smallblacktriangleleft}{symbols}{\mathbin}
292 \fdsy@DeclareSymbol{\smallblacktriangledown}{symbols}{\mathbin}
293 \fdsy@DeclareSymbol{\medtriangleright}{symbols}{\mathbin}
294 \fdsy@DeclareAlias{\triangleright}{symbols}{\mathbin}
295 \fdsy@DeclareSymbol{\medtriangleup}{symbols}{\mathbin}
296 \fdsy@DeclareAlias{\triangle}{symbols}{\mathbin}
297 \fdsy@DeclareAlias{\vartriangle}{symbols}{\mathbin}
298 \fdsy@DeclareSymbol{\medtriangleleft}{symbols}{\mathbin}
299 \fdsy@DeclareAlias{\triangleleft}{symbols}{\mathbin}
300 \fdsy@DeclareSymbol{\medtriangledown}{symbols}{\mathbin}
301 \fdsy@DeclareAlias{\triangledown}{symbols}{\mathbin}
302 \fdsy@DeclareSymbol{\medblacktriangleright}{symbols}{\mathbin}
303 \fdsy@DeclareAlias{\blacktriangleright}{symbols}{\mathbin}
304 \fdsy@DeclareSymbol{\medblacktriangleup}{symbols}{\mathbin}
305 \fdsy@DeclareAlias{\blacktriangle}{symbols}{\mathbin}
306 \fdsy@DeclareSymbol{\medblacktriangleleft}{symbols}{\mathbin}
307 \fdsy@DeclareAlias{\blacktriangleleft}{symbols}{\mathbin}
308 \fdsy@DeclareSymbol{\medblacktriangledown}{symbols}{\mathbin}
309 \fdsy@DeclareAlias{\blacktriangledown}{symbols}{\mathbin}
310 \fdsy@DeclareSymbol{\largetriangleup}{symbols}{\mathord}
311 \fdsy@DeclareAlias{\bigtriangleup}{symbols}{\mathbin}
312 \fdsy@DeclareSymbol{\largetriangledown}{symbols}{\mathord}
313 \fdsy@DeclareAlias{\bigtriangledown}{symbols}{\mathbin}
314 \fdsy@DeclareSymbol{\smallcircle}{symbols}{\mathbin}
315 \fdsy@DeclareAlias{\circ}{symbols}{\mathbin}
316 \fdsy@DeclareAlias{\smwhtcircle}{symbols}{\mathbin}
317 \fdsy@DeclareSymbol{\smallblackcircle}{symbols}{\mathbin}

```

```

318 \fdsy@DeclareAlias{\bullet}{symbols}{\mathbin}
319 \fdsy@DeclareAlias{\smblkcrcle}{symbols}{\mathbin}
320 \fdsy@DeclareSymbol{\medcirc}{symbols}{\mathbin}
321 \fdsy@DeclareAlias{\mdlgwhtcircle}{symbols}{\mathbin}
322 \fdsy@DeclareSymbol{\medblackcircle}{symbols}{\mathbin}
323 \fdsy@DeclareAlias{\mdlgblkcircle}{symbols}{\mathbin}
324 \fdsy@DeclareSymbol{\ominus}{symbols}{\mathbin}
325 \fdsy@DeclareSymbol{\overt}{symbols}{\mathbin}
326 \fdsy@DeclareAlias{\circledvert}{symbols}{\mathbin}
327 \fdsy@DeclareSymbol{\oslash}{symbols}{\mathbin}
328 \fdsy@DeclareSymbol{\obackslash}{symbols}{\mathbin}
329 \fdsy@DeclareAlias{\obslash}{symbols}{\mathbin}
330 \fdsy@DeclareSymbol{\oplus}{symbols}{\mathbin}
331 \fdsy@DeclareSymbol{\otimes}{symbols}{\mathbin}
332 \fdsy@DeclareSymbol{\odot}{symbols}{\mathbin}
333 \fdsy@DeclareSymbol{\ocirc}{symbols}{\mathbin}
334 \fdsy@DeclareAlias{\circledcirc}{symbols}{\mathbin}
335 \fdsy@DeclareSymbol{\oast}{symbols}{\mathbin}
336 \fdsy@DeclareAlias{\circledast}{symbols}{\mathbin}
337 \fdsy@DeclareSymbol{\odash}{symbols}{\mathbin}
338 \fdsy@DeclareAlias{\circleddash}{symbols}{\mathbin}
339 \fdsy@DeclareSymbol{\oequal}{symbols}{\mathbin}
340 \fdsy@DeclareAlias{\circledequal}{symbols}{\mathbin}
341 \fdsy@DeclareSymbol{\emptyset}{symbols}{\mathord}
342 \fdsy@DeclareAlias{\diameter}{symbols}{\mathord}
343 \fdsy@DeclareAlias{\varnothing}{symbols}{\mathord}
344 \fdsy@DeclareSymbol{\revemptyset}{symbols}{\mathord}
345 \fdsy@DeclareSymbol{\largecircle}{symbols}{\mathord}
346 \fdsy@DeclareAlias{\bigcirc}{symbols}{\mathord}
347 \fdsy@DeclareAlias{\lgwhtcircle}{symbols}{\mathord}
348 \fdsy@DeclareSymbol{\largeblackcircle}{symbols}{\mathord}
349 \fdsy@DeclareAlias{\lgblkcircle}{symbols}{\mathord}
350 \fdsy@DeclareSymbol{\smallsquare}{symbols}{\mathbin}
351 \fdsy@DeclareAlias{\smwhtsquare}{symbols}{\mathbin}
352 \fdsy@DeclareSymbol{\smallblacksquare}{symbols}{\mathbin}
353 \fdsy@DeclareAlias{\smblksquare}{symbols}{\mathbin}
354 \fdsy@DeclareSymbol{\medsquare}{symbols}{\mathbin}
355 \fdsy@DeclareAlias{\square}{symbols}{\mathbin}
356 \fdsy@DeclareAlias{\Box}{symbols}{\mathbin}
357 \fdsy@DeclareAlias{\mdlgwhtsquare}{symbols}{\mathbin}
358 \fdsy@DeclareAlias{\mdwhtsquare}{symbols}{\mathbin}
359 \fdsy@DeclareSymbol{\medblacksquare}{symbols}{\mathbin}
360 \fdsy@DeclareAlias{\mdlgblksquare}{symbols}{\mathbin}
361 \fdsy@DeclareAlias{\mdblksquare}{symbols}{\mathbin}
362 \fdsy@DeclareSymbol{\boxminus}{symbols}{\mathbin}

```

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363 \fdsy@DeclareSymbol{\boxvert}{symbols}{\mathbin}
364 \fdsy@DeclareAlias{\boxbar}{symbols}{\mathbin}
365 \fdsy@DeclareSymbol{\boxslash}{symbols}{\mathbin}
366 \fdsy@DeclareAlias{\boxdiag}{symbols}{\mathbin}
367 \fdsy@DeclareSymbol{\boxbackslash}{symbols}{\mathbin}
368 \fdsy@DeclareAlias{\boxbslash}{symbols}{\mathbin}
369 \fdsy@DeclareSymbol{\boxplus}{symbols}{\mathbin}
370 \fdsy@DeclareSymbol{\boxtimes}{symbols}{\mathbin}
371 \fdsy@DeclareSymbol{\boxdot}{symbols}{\mathbin}
372 \fdsy@DeclareSymbol{\boxbox}{symbols}{\mathbin}
373 \fdsy@DeclareSymbol{\largesquare}{symbols}{\mathord}
374 \fdsy@DeclareAlias{\lgwhtsquare}{symbols}{\mathord}
375 \fdsy@DeclareSymbol{\largeblacksquare}{symbols}{\mathord}
376 \fdsy@DeclareAlias{\lgblksquare}{symbols}{\mathord}
377 \fdsy@DeclareSymbol{\smalldiamond}{symbols}{\mathbin}
378 \fdsy@DeclareAlias{\diamond}{symbols}{\mathbin}
379 \fdsy@DeclareAlias{\smwhtdiamond}{symbols}{\mathbin}
380 \fdsy@DeclareSymbol{\smallblackdiamond}{symbols}{\mathbin}
381 \fdsy@DeclareAlias{\blackdiamond}{symbols}{\mathbin}
382 \fdsy@DeclareAlias{\smbldiamond}{symbols}{\mathbin}
383 \fdsy@DeclareSymbol{\meddiamond}{symbols}{\mathbin}
384 \fdsy@DeclareAlias{\Diamond}{symbols}{\mathbin}
385 \fdsy@DeclareAlias{\mdlgwhtdiamond}{symbols}{\mathbin}
386 \fdsy@DeclareAlias{\mdwhtdiamond}{symbols}{\mathbin}
387 \fdsy@DeclareSymbol{\medblackdiamond}{symbols}{\mathbin}
388 \fdsy@DeclareAlias{\mdlgblkdiamond}{symbols}{\mathbin}
389 \fdsy@DeclareAlias{\mdblkdiamond}{symbols}{\mathbin}
390 \fdsy@DeclareSymbol{\diamondminus}{symbols}{\mathbin}
391 \fdsy@DeclareSymbol{\diamondvert}{symbols}{\mathbin}
392 \fdsy@DeclareSymbol{\diamondslash}{symbols}{\mathbin}
393 \fdsy@DeclareSymbol{\diamondbackslash}{symbols}{\mathbin}
394 \fdsy@DeclareAlias{\diamondbslash}{symbols}{\mathbin}
395 \fdsy@DeclareSymbol{\diamondplus}{symbols}{\mathbin}
396 \fdsy@DeclareSymbol{\diamondtimes}{symbols}{\mathbin}
397 \fdsy@DeclareSymbol{\diamonddot}{symbols}{\mathbin}
398 \fdsy@DeclareAlias{\diamondcdot}{symbols}{\mathbin}
399 \fdsy@DeclareSymbol{\diamondddiamond}{symbols}{\mathbin}
400 \fdsy@DeclareSymbol{\smalllozenge}{symbols}{\mathord}
401 \fdsy@DeclareAlias{\smwhtlozenge}{symbols}{\mathord}
402 \fdsy@DeclareSymbol{\smallblacklozenge}{symbols}{\mathord}
403 \fdsy@DeclareAlias{\smbblklozenge}{symbols}{\mathord}
404 \fdsy@DeclareSymbol{\medlozenge}{symbols}{\mathord}
405 \fdsy@DeclareAlias{\lozenge}{symbols}{\mathord}
406 \fdsy@DeclareAlias{\mdlgwhtlozenge}{symbols}{\mathord}
407 \fdsy@DeclareAlias{\mdwhtlozenge}{symbols}{\mathord}

```

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408 \fdsy@DeclareSymbol{\medblacklozenge}{symbols}{\mathord}
409 \fdsy@DeclareAlias{\blacklozenge}{symbols}{\mathord}
410 \fdsy@DeclareAlias{\mdlgblklozenge}{symbols}{\mathord}
411 \fdsy@DeclareAlias{\mdblklozenge}{symbols}{\mathord}
412 \fdsy@DeclareSymbol{\lozengeminus}{symbols}{\mathord}
413 \fdsy@DeclareSymbol{\smallwhitestar}{symbols}{\mathbin}
414 \fdsy@DeclareAlias{\smwhitestar}{symbols}{\mathbin}
415 \fdsy@DeclareSymbol{\smallblackstar}{symbols}{\mathbin}
416 \fdsy@DeclareAlias{\star}{symbols}{\mathbin}
417 \fdsy@DeclareSymbol{\medwhitestar}{symbols}{\mathbin}
418 \fdsy@DeclareSymbol{\medblackstar}{symbols}{\mathbin}
419 \fdsy@DeclareAlias{\medstar}{symbols}{\mathbin}
420 \fdsy@DeclareSymbol{\largewhitestar}{symbols}{\mathord}
421 \fdsy@DeclareSymbol{\largeblackstar}{symbols}{\mathord}
422 \fdsy@DeclareAlias{\bigstar}{symbols}{\mathord}
423 \fdsy@DeclareSymbol{\ast}{symbols}{\mathbin}
424 \fdsy@DeclareSymbol{\infty}{symbols}{\mathord}
425 \fdsy@DeclareSymbol{\propto}{symbols}{\mathrel}
426 \fdsy@DeclareAlias{\varpropto}{symbols}{\mathrel}
427 \fdsy@DeclareSymbol{\backpropto}{symbols}{\mathrel}
428 \fdsy@DeclareAlias{\propfrom}{symbols}{\mathrel}
429 \fdsy@DeclareSymbol{\crossing}{symbols}{\mathrel}
430 \fdsy@DeclareSymbol{\between}{symbols}{\mathrel}
431 \fdsy@DeclareSymbol{\separated}{symbols}{\mathrel}
432 \fdsy@DeclareSymbol{\bot}{symbols}{\mathord}
433 \fdsy@DeclareSymbol{\top}{symbols}{\mathord}
434 \fdsy@DeclareAlias{\intercal}{symbols}{\mathbin}
435 \fdsy@DeclareSymbol{\wreath}{symbols}{\mathbin}
436 \fdsy@DeclareAlias{\wr}{symbols}{\mathbin}
437 \fdsy@DeclareSymbol{\angle}{symbols}{\mathord}
438 \fdsy@DeclareSymbol{\revangle}{symbols}{\mathord}
439 \fdsy@DeclareSymbol{\measuredangle}{symbols}{\mathord}
440 \fdsy@DeclareSymbol{\revmeasuredangle}{symbols}{\mathord}
441 \fdsy@DeclareAlias{\measuredangleleft}{symbols}{\mathord}
442 \fdsy@DeclareSymbol{\sphericalangle}{symbols}{\mathord}
443 \fdsy@DeclareSymbol{\sphericalangleup}{symbols}{\mathord}
444 \fdsy@DeclareSymbol{\sphericalangleleft}{symbols}{\mathord}
445 \fdsy@DeclareAlias{\revsphericalangle}{symbols}{\mathord}
446 \fdsy@DeclareAlias{\gtlpar}{symbols}{\mathord}
447 \fdsy@DeclareSymbol{\sphericalangledown}{symbols}{\mathord}
448 \fdsy@DeclareSymbol{\rightangle}{symbols}{\mathord}
449 \fdsy@DeclareSymbol{\measuredrightangle}{symbols}{\mathord}
450 \fdsy@DeclareSymbol{\rightanglesquare}{symbols}{\mathord}
451 \fdsy@DeclareAlias{\rightanglesqr}{symbols}{\mathord}
452 \fdsy@DeclareSymbol{\measuredrightangledot}{symbols}{\mathord}

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453 \fdsy@DeclareAlias{\rightanglemdot}{symbols}{\mathord}
454 \fdsy@DeclareSymbol{\prime}{symbols}{\mathord}
455 \fdsy@DeclareSymbol{\backprime}{symbols}{\mathord}
456 \fdsy@DeclareSymbol{\smallprod}{symbols}{\mathop}
457 \fdsy@DeclareSymbol{\smallcoprod}{symbols}{\mathop}
458 \fdsy@DeclareAlias{\amalg}{symbols}{\mathbin}
459 \fdsy@DeclareSymbol{\smallint}{symbols}{\mathop}
460 \fdsy@DeclareSymbol{\checkmark}{symbols}{\mathord}
461 \fdsy@DeclareSymbol{\lightning}{symbols}{\mathord}
462 \fdsy@DeclareAlias{\downzigzagarrow}{symbols}{\mathord}
463 \fdsy@DeclareSymbol{\diamondsuit}{symbols}{\mathord}
464 \fdsy@DeclareSymbol{\vardiamondsuit}{symbols}{\mathord}
465 \fdsy@DeclareSymbol{\heartsuit}{symbols}{\mathord}
466 \fdsy@DeclareSymbol{\varheartsuit}{symbols}{\mathord}
467 \fdsy@DeclareSymbol{\spadesuit}{symbols}{\mathord}
468 \fdsy@DeclareSymbol{\clubsuit}{symbols}{\mathord}
469 \fdsy@DeclareSymbol{\maltese}{symbols}{\mathord}
470 \fdsy@DeclareSymbol{\starofdavid}{symbols}{\mathord}
471 \fdsy@DeclareSymbol{\sector}{symbols}{\mathord}
472 \fdsy@DeclareSymbol{\forall}{symbols}{\mathord}
473 \fdsy@DeclareSymbol{\exists}{symbols}{\mathord}
474 \fdsy@DeclareSymbol{\nexists}{symbols}{\mathord}
475 \fdsy@DeclareSymbol{\Finv}{symbols}{\mathord}
476 \fdsy@DeclareSymbol{\Game}{symbols}{\mathord}
477 \fdsy@DeclareSymbol{\complement}{symbols}{\mathord}
478 \fdsy@DeclareSymbol{\flat}{symbols}{\mathord}
479 \fdsy@DeclareSymbol{\natural}{symbols}{\mathord}
480 \fdsy@DeclareSymbol{\sharp}{symbols}{\mathord}
481 \fdsy@DeclareSymbol{\aleph}{symbols}{\mathord}
482 \fdsy@DeclareSymbol{\beth}{symbols}{\mathord}
483 \fdsy@DeclareSymbol{\gimel}{symbols}{\mathord}
484 \fdsy@DeclareSymbol{\daleth}{symbols}{\mathord}
485 \fdsy@DeclareSymbol{\wp}{symbols}{\mathord}

```

FdSymbolB: relations

```

486 \fdsy@setslot{0}
487 \fdsy@DeclareSymbol{\equal}{relations}{\mathrel}
488 \fdsy@DeclareSymbol{\equiv}{relations}{\mathrel}
489 \fdsy@DeclareSymbol{\sim}{relations}{\mathrel}
490 \fdsy@DeclareSymbol{\backsim}{relations}{\mathrel}
491 \fdsy@DeclareSymbol{\approx}{relations}{\mathrel}
492 \fdsy@DeclareSymbol{\triplesim}{relations}{\mathrel}
493 \fdsy@DeclareAlias{\approxident}{relations}{\mathrel}
494 \fdsy@DeclareSymbol{\simeq}{relations}{\mathrel}
495 \fdsy@DeclareSymbol{\backsimeq}{relations}{\mathrel}
496 \fdsy@DeclareSymbol{\eqsim}{relations}{\mathrel}

```

```

497 \fdsy@DeclareSymbol{\cong}{relations}{\mathrel}
498 \fdsy@DeclareSymbol{\backcong}{relations}{\mathrel}
499 \fdsy@DeclareSymbol{\approxeq}{relations}{\mathrel}
500 \fdsy@DeclareSymbol{\bumpeq}{relations}{\mathrel}
501 \fdsy@DeclareSymbol{\bumpeqeq}{relations}{\mathrel}
502 \fdsy@DeclareSymbol{\Bumpeq}{relations}{\mathrel}
503 \fdsy@DeclareSymbol{\doteq}{relations}{\mathrel}
504 \fdsy@DeclareSymbol{\eqdot}{relations}{\mathrel}
505 \fdsy@DeclareSymbol{\Doteq}{relations}{\mathrel}
506 \fdsy@DeclareAlias{\doteqdot}{relations}{\mathrel}
507 \fdsy@DeclareSymbol{\fallingdotseq}{relations}{\mathrel}
508 \fdsy@DeclareSymbol{\risingdotseq}{relations}{\mathrel}
509 \fdsy@DeclareSymbol{\smile}{relations}{\mathrel}
510 \fdsy@DeclareAlias{\smallsmile}{relations}{\mathrel}
511 \fdsy@DeclareSymbol{\frown}{relations}{\mathrel}
512 \fdsy@DeclareAlias{\smallfrown}{relations}{\mathrel}
513 \fdsy@DeclareSymbol{\smilefrown}{relations}{\mathrel}
514 \fdsy@DeclareAlias{\asymp}{relations}{\mathrel}
515 \fdsy@DeclareSymbol{\frownsmile}{relations}{\mathrel}
516 \fdsy@DeclareAlias{\closure}{relations}{\mathrel}
517 \fdsy@DeclareSymbol{\smileeq}{relations}{\mathrel}
518 \fdsy@DeclareSymbol{\frowneq}{relations}{\mathrel}
519 \fdsy@DeclareAlias{\arceq}{relations}{\mathrel}
520 \fdsy@DeclareSymbol{\eqcirc}{relations}{\mathrel}
521 \fdsy@DeclareSymbol{\circeq}{relations}{\mathrel}
522 \fdsy@DeclareSymbol{\wedg eq}{relations}{\mathrel}
523 \fdsy@DeclareAlias{\hateq}{relations}{\mathrel}
524 \fdsy@DeclareSymbol{\veeeq}{relations}{\mathrel}
525 \fdsy@DeclareSymbol{\stareq}{relations}{\mathrel}
526 \fdsy@DeclareSymbol{\triangleeq}{relations}{\mathrel}
527 \fdsy@DeclareAlias{\triangleq}{relations}{\mathrel}
528 \fdsy@DeclareSymbol{\in}{relations}{\mathrel}
529 \fdsy@DeclareSymbol{\owns}{relations}{\mathrel}
530 \fdsy@DeclareAlias{\ni}{relations}{\mathrel}
531 \fdsy@DeclareSymbol{\less}{relations}{\mathrel}
532 \fdsy@DeclareSymbol{\gtr}{relations}{\mathrel}
533 \fdsy@DeclareSymbol{\leq}{relations}{\mathrel}
534 \fdsy@DeclareAlias{\le}{relations}{\mathrel}
535 \fdsy@DeclareSymbol{\geq}{relations}{\mathrel}
536 \fdsy@DeclareAlias{\ge}{relations}{\mathrel}
537 \fdsy@DeclareSymbol{\leqslant}{relations}{\mathrel}
538 \fdsy@DeclareSymbol{\geqslant}{relations}{\mathrel}
539 \fdsy@DeclareSymbol{\leqq}{relations}{\mathrel}
540 \fdsy@DeclareSymbol{\geqq}{relations}{\mathrel}
541 \fdsy@DeclareSymbol{\lesssim}{relations}{\mathrel}

```

```

542 \fdsy@DeclareSymbol{\gtrsim}{relations}{\mathrel}
543 \fdsy@DeclareSymbol{\lessapprox}{relations}{\mathrel}
544 \fdsy@DeclareSymbol{\gtrapprox}{relations}{\mathrel}
545 \fdsy@DeclareSymbol{\lessgtr}{relations}{\mathrel}
546 \fdsy@DeclareSymbol{\gtrless}{relations}{\mathrel}
547 \fdsy@DeclareSymbol{\lesseqgtr}{relations}{\mathrel}
548 \fdsy@DeclareSymbol{\gtreqless}{relations}{\mathrel}
549 \fdsy@DeclareSymbol{\lesseqqgtr}{relations}{\mathrel}
550 \fdsy@DeclareSymbol{\gtreqqless}{relations}{\mathrel}
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552 \fdsy@DeclareSymbol{\gtreqlesslslant}{relations}{\mathrel}
553 \fdsy@DeclareSymbol{\ll}{relations}{\mathrel}
554 \fdsy@DeclareSymbol{\gg}{relations}{\mathrel}
555 \fdsy@DeclareSymbol{\lll}{relations}{\mathrel}
556 \fdsy@DeclareAlias{\llless}{relations}{\mathrel}
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558 \fdsy@DeclareAlias{\gggtr}{relations}{\mathrel}
559 \fdsy@DeclareSymbol{\lessclosed}{relations}{\mathrel}
560 \fdsy@DeclareAlias{\lhd}{relations}{\mathbin}
561 \fdsy@DeclareAlias{\vartriangleleft}{relations}{\mathrel}
562 \fdsy@DeclareSymbol{\gtrclosed}{relations}{\mathrel}
563 \fdsy@DeclareAlias{\rhd}{relations}{\mathbin}
564 \fdsy@DeclareAlias{\vartriangleright}{relations}{\mathrel}
565 \fdsy@DeclareSymbol{\leqclosed}{relations}{\mathrel}
566 \fdsy@DeclareAlias{\unlhd}{relations}{\mathbin}
567 \fdsy@DeclareAlias{\trianglelefteq}{relations}{\mathrel}
568 \fdsy@DeclareSymbol{\geqclosed}{relations}{\mathrel}
569 \fdsy@DeclareAlias{\unrhd}{relations}{\mathbin}
570 \fdsy@DeclareAlias{\trianglerighteq}{relations}{\mathrel}
571 \fdsy@DeclareSymbol{\lesscc}{relations}{\mathrel}
572 \fdsy@DeclareAlias{\ltcc}{relations}{\mathrel}
573 \fdsy@DeclareSymbol{\gtrcc}{relations}{\mathrel}
574 \fdsy@DeclareAlias{\gtcc}{relations}{\mathrel}
575 \fdsy@DeclareSymbol{\leqslcc}{relations}{\mathrel}
576 \fdsy@DeclareAlias{\lescc}{relations}{\mathrel}
577 \fdsy@DeclareSymbol{\geqslcc}{relations}{\mathrel}
578 \fdsy@DeclareAlias{\gescc}{relations}{\mathrel}
579 \fdsy@DeclareSymbol{\sqsubset}{relations}{\mathrel}
580 \fdsy@DeclareSymbol{\sqsupset}{relations}{\mathrel}
581 \fdsy@DeclareSymbol{\sqsubseteq}{relations}{\mathrel}
582 \fdsy@DeclareSymbol{\sqsupseteq}{relations}{\mathrel}
583 \fdsy@DeclareSymbol{\sqsubseteqq}{relations}{\mathrel}
584 \fdsy@DeclareSymbol{\sqsupseteqq}{relations}{\mathrel}
585 \fdsy@DeclareSymbol{\Ssqsubset}{relations}{\mathrel}
586 \fdsy@DeclareSymbol{\Ssqsupset}{relations}{\mathrel}

```

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587 \fdsy@DeclareSymbol{\subset}{relations}{\mathrel}
588 \fdsy@DeclareSymbol{\supset}{relations}{\mathrel}
589 \fdsy@DeclareSymbol{\subseteq}{relations}{\mathrel}
590 \fdsy@DeclareSymbol{\supseteq}{relations}{\mathrel}
591 \fdsy@DeclareSymbol{\subseteq}{relations}{\mathrel}
592 \fdsy@DeclareSymbol{\supseteq}{relations}{\mathrel}
593 \fdsy@DeclareSymbol{\Subset}{relations}{\mathrel}
594 \fdsy@DeclareSymbol{\Supset}{relations}{\mathrel}
595 \fdsy@DeclareSymbol{\prec}{relations}{\mathrel}
596 \fdsy@DeclareSymbol{\succ}{relations}{\mathrel}
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599 \fdsy@DeclareSymbol{\preccurlyeq}{relations}{\mathrel}
600 \fdsy@DeclareSymbol{\succcurlyeq}{relations}{\mathrel}
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604 \fdsy@DeclareSymbol{\succsim}{relations}{\mathrel}
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606 \fdsy@DeclareSymbol{\succapprox}{relations}{\mathrel}
607 \fdsy@DeclareSymbol{\lessdot}{relations}{\mathrel}
608 \fdsy@DeclareSymbol{\gtrdot}{relations}{\mathrel}
609 \fdsy@DeclareSymbol{\leqdot}{relations}{\mathrel}
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614 \fdsy@DeclareAlias{\gesdot}{relations}{\mathrel}
615 \fdsy@DeclareSymbol{\eqslantless}{relations}{\mathrel}
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617 \fdsy@DeclareSymbol{\curlyeqprec}{relations}{\mathrel}
618 \fdsy@DeclareSymbol{\curlyeqsucc}{relations}{\mathrel}
619 \fdsy@DeclareSymbol{\nequal}{relations}{\mathrel}
620 \fdsy@DeclareAlias{\neq}{relations}{\mathrel}
621 \fdsy@DeclareAlias{\ne}{relations}{\mathrel}
622 \fdsy@DeclareSymbol{\nequiv}{relations}{\mathrel}
623 \fdsy@DeclareSymbol{\nsim}{relations}{\mathrel}
624 \fdsy@DeclareSymbol{\nbacksim}{relations}{\mathrel}
625 \fdsy@DeclareSymbol{\napprox}{relations}{\mathrel}
626 \fdsy@DeclareSymbol{\ntriplesim}{relations}{\mathrel}
627 \fdsy@DeclareAlias{\napproxident}{relations}{\mathrel}
628 \fdsy@DeclareSymbol{\nsimeq}{relations}{\mathrel}
629 \fdsy@DeclareAlias{\nsime}{relations}{\mathrel}
630 \fdsy@DeclareSymbol{\nbacksimeq}{relations}{\mathrel}
631 \fdsy@DeclareSymbol{\neqsim}{relations}{\mathrel}

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632 \fdsy@DeclareSymbol{\ncong}{relations}{\mathrel}
633 \fdsy@DeclareSymbol{\nbackcong}{relations}{\mathrel}
634 \fdsy@DeclareSymbol{\napproxeq}{relations}{\mathrel}
635 \fdsy@DeclareSymbol{\nbumpeq}{relations}{\mathrel}
636 \fdsy@DeclareSymbol{\nbumpeqeq}{relations}{\mathrel}
637 \fdsy@DeclareSymbol{\nBumpeq}{relations}{\mathrel}
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648 \fdsy@DeclareAlias{\nclosure}{relations}{\mathrel}
649 \fdsy@DeclareSymbol{\nsmileeq}{relations}{\mathrel}
650 \fdsy@DeclareSymbol{\nfrowneq}{relations}{\mathrel}
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674 \fdsy@DeclareSymbol{\ngtrapprox}{relations}{\mathrel}
675 \fdsy@DeclareSymbol{\nlessgtr}{relations}{\mathrel}
676 \fdsy@DeclareSymbol{\ngtrless}{relations}{\mathrel}

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677 \fdsy@DeclareSymbol{\nlesseqgtr}{relations}{\mathrel}
678 \fdsy@DeclareSymbol{\ngtreqlless}{relations}{\mathrel}
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685 \fdsy@DeclareSymbol{\nlll}{relations}{\mathrel}
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695 \fdsy@DeclareSymbol{\nlesscc}{relations}{\mathrel}
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697 \fdsy@DeclareSymbol{\ngtrcc}{relations}{\mathrel}
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699 \fdsy@DeclareSymbol{\nleqslcc}{relations}{\mathrel}
700 \fdsy@DeclareAlias{\nlescc}{relations}{\mathrel}
701 \fdsy@DeclareSymbol{\ngeqslcc}{relations}{\mathrel}
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703 \fdsy@DeclareSymbol{\nsssubset}{relations}{\mathrel}
704 \fdsy@DeclareSymbol{\nsssupset}{relations}{\mathrel}
705 \fdsy@DeclareSymbol{\nsssubseteq}{relations}{\mathrel}
706 \fdsy@DeclareSymbol{\nsssupseteq}{relations}{\mathrel}
707 \fdsy@DeclareSymbol{\nsssubseteqq}{relations}{\mathrel}
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718 \fdsy@DeclareSymbol{\nSupset}{relations}{\mathrel}
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720 \fdsy@DeclareSymbol{\nsucc}{relations}{\mathrel}
721 \fdsy@DeclareSymbol{\npreceq}{relations}{\mathrel}

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726 \fdsy@DeclareSymbol{\nsucceq}{relations}{\mathrel}
727 \fdsy@DeclareSymbol{\nprecsim}{relations}{\mathrel}
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734 \fdsy@DeclareSymbol{\ngeqdot}{relations}{\mathrel}
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738 \fdsy@DeclareAlias{\ngesdot}{relations}{\mathrel}
739 \fdsy@DeclareSymbol{\neqslantless}{relations}{\mathrel}
740 \fdsy@DeclareSymbol{\neqslantgtr}{relations}{\mathrel}
741 \fdsy@DeclareSymbol{\ncurlyeqprec}{relations}{\mathrel}
742 \fdsy@DeclareSymbol{\ncurlyeqsucc}{relations}{\mathrel}
743 \fdsy@DeclareSymbol{\simneq}{relations}{\mathrel}
744 \fdsy@DeclareSymbol{\backsimneq}{relations}{\mathrel}
745 \fdsy@DeclareSymbol{\lneq}{relations}{\mathrel}
746 \fdsy@DeclareSymbol{\gneq}{relations}{\mathrel}
747 \fdsy@DeclareSymbol{\lneqq}{relations}{\mathrel}
748 \fdsy@DeclareAlias{\lvertneqq}{relations}{\mathrel}
749 \fdsy@DeclareSymbol{\gneqq}{relations}{\mathrel}
750 \fdsy@DeclareAlias{\gvertneqq}{relations}{\mathrel}
751 \fdsy@DeclareSymbol{\lnsim}{relations}{\mathrel}
752 \fdsy@DeclareSymbol{\gnsim}{relations}{\mathrel}
753 \fdsy@DeclareSymbol{\lnapprox}{relations}{\mathrel}
754 \fdsy@DeclareSymbol{\gnapprox}{relations}{\mathrel}
755 \fdsy@DeclareSymbol{\lessneqqgtr}{relations}{\mathrel}
756 \fdsy@DeclareSymbol{\gtrneqqless}{relations}{\mathrel}
757 \fdsy@DeclareSymbol{\sqsubsetneq}{relations}{\mathrel}
758 \fdsy@DeclareSymbol{\sqsupsetneq}{relations}{\mathrel}
759 \fdsy@DeclareSymbol{\sqsubsetneqq}{relations}{\mathrel}
760 \fdsy@DeclareSymbol{\sqsupsetneqq}{relations}{\mathrel}
761 \fdsy@DeclareSymbol{\subsetneq}{relations}{\mathrel}
762 \fdsy@DeclareAlias{\varsubsetneq}{relations}{\mathrel}
763 \fdsy@DeclareSymbol{\supsetneq}{relations}{\mathrel}
764 \fdsy@DeclareAlias{\varsupsetneq}{relations}{\mathrel}
765 \fdsy@DeclareSymbol{\subsetneqq}{relations}{\mathrel}
766 \fdsy@DeclareAlias{\varsubsetneqq}{relations}{\mathrel}

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767 \fdsy@DeclareSymbol{\supsetneqq}{relations}{\mathrel}
768 \fdsy@DeclareAlias{\varsupsetneqq}{relations}{\mathrel}
769 \fdsy@DeclareSymbol{\precneq}{relations}{\mathrel}
770 \fdsy@DeclareSymbol{\succneq}{relations}{\mathrel}
771 \fdsy@DeclareSymbol{\precneqq}{relations}{\mathrel}
772 \fdsy@DeclareSymbol{\succneqq}{relations}{\mathrel}
773 \fdsy@DeclareSymbol{\precnsim}{relations}{\mathrel}
774 \fdsy@DeclareSymbol{\succnsim}{relations}{\mathrel}
775 \fdsy@DeclareSymbol{\precnapprox}{relations}{\mathrel}
776 \fdsy@DeclareSymbol{\succnapprox}{relations}{\mathrel}
777
778 \DeclareRobustCommand{\coloneq}{\mathrel{\{\vdotdot\}\equal{}}}
779 \let\coloneqq\coloneq

FdSymbolC: arrows
780 \fdsy@setslot{0}
781 \fdsy@DeclareSymbol{\rightarrow}{arrows}{\mathrel}
782 \fdsy@DeclareAlias{\to}{arrows}{\mathrel}
783 \fdsy@DeclareSymbol{\uparrow}{arrows}{\mathrel}
784 \fdsy@DeclareSymbol{\leftarrow}{arrows}{\mathrel}
785 \fdsy@DeclareAlias{\gets}{arrows}{\mathrel}
786 \fdsy@DeclareSymbol{\downarrow}{arrows}{\mathrel}
787 \fdsy@DeclareSymbol{\nearrow}{arrows}{\mathrel}
788 \fdsy@DeclareSymbol{\nwarrow}{arrows}{\mathrel}
789 \fdsy@DeclareSymbol{\swarrow}{arrows}{\mathrel}
790 \fdsy@DeclareSymbol{\searrow}{arrows}{\mathrel}
791 \fdsy@DeclareSymbol{\Rightarrow}{arrows}{\mathrel}
792 \fdsy@DeclareSymbol{\Uparrow}{arrows}{\mathrel}
793 \fdsy@DeclareSymbol{\Leftarrow}{arrows}{\mathrel}
794 \fdsy@DeclareSymbol{\Downarrow}{arrows}{\mathrel}
795 \fdsy@DeclareSymbol{\Nearrow}{arrows}{\mathrel}
796 \fdsy@DeclareSymbol{\Nwarrow}{arrows}{\mathrel}
797 \fdsy@DeclareSymbol{\Swarrow}{arrows}{\mathrel}
798 \fdsy@DeclareSymbol{\Searrow}{arrows}{\mathrel}
799 \fdsy@DeclareSymbol{\leftrightharpoonup}{arrows}{\mathrel}
800 \fdsy@DeclareSymbol{\updownarrow}{arrows}{\mathrel}
801 \fdsy@DeclareSymbol{\neswarpoonup}{arrows}{\mathrel}
802 \fdsy@DeclareSymbol{\nwsearrow}{arrows}{\mathrel}
803 \fdsy@DeclareSymbol{\Leftrightharpoonup}{arrows}{\mathrel}
804 \fdsy@DeclareSymbol{\Updownarrow}{arrows}{\mathrel}
805 \fdsy@DeclareSymbol{\Neswarpoonup}{arrows}{\mathrel}
806 \fdsy@DeclareSymbol{\Nwsearrow}{arrows}{\mathrel}
807 \fdsy@DeclareSymbol{\twoheadrightarrow}{arrows}{\mathrel}
808 \fdsy@DeclareSymbol{\twoheaduparrow}{arrows}{\mathrel}
809 \fdsy@DeclareSymbol{\twoheadleftarrow}{arrows}{\mathrel}
810 \fdsy@DeclareSymbol{\twoheaddownarrow}{arrows}{\mathrel}

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811 \fdsy@DeclareSymbol{\twoheadnearrow}{arrows}{\mathrel}
812 \fdsy@DeclareSymbol{\twoheadnwarrow}{arrows}{\mathrel}
813 \fdsy@DeclareSymbol{\twoheadswarrow}{arrows}{\mathrel}
814 \fdsy@DeclareSymbol{\twoheadsearrow}{arrows}{\mathrel}
815 \fdsy@DeclareSymbol{\rightarrowtail}{arrows}{\mathrel}
816 \fdsy@DeclareSymbol{\uparrowtail}{arrows}{\mathrel}
817 \fdsy@DeclareSymbol{\leftarrowtail}{arrows}{\mathrel}
818 \fdsy@DeclareSymbol{\downarrowtail}{arrows}{\mathrel}
819 \fdsy@DeclareSymbol{\nearrowtail}{arrows}{\mathrel}
820 \fdsy@DeclareSymbol{\nwarrowtail}{arrows}{\mathrel}
821 \fdsy@DeclareSymbol{\swarrowtail}{arrows}{\mathrel}
822 \fdsy@DeclareSymbol{\searrowtail}{arrows}{\mathrel}
823 \fdsy@DeclareSymbol{\rightrightarrows}{arrows}{\mathrel}
824 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
825 \fdsy@DeclareSymbol{\upmapsto}{arrows}{\mathrel}
826 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
827 \fdsy@DeclareSymbol{\leftmapsto}{arrows}{\mathrel}
828 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
829 \fdsy@DeclareSymbol{\downmapsto}{arrows}{\mathrel}
830 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
831 \fdsy@DeclareSymbol{\nrightarrow}{arrows}{\mathrel}
832 \fdsy@DeclareSymbol{\nrightarrow}{arrows}{\mathrel}
833 \fdsy@DeclareSymbol{\swarrow}{arrows}{\mathrel}
834 \fdsy@DeclareSymbol{\searrow}{arrows}{\mathrel}
835 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
836 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}
837 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
838 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
839 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
840 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
841 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
842 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}
843 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
844 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
845 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}
846 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
847 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
848 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
849 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}
850 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
851 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
852 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}
853 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
854 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
855 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}

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856 \fdsy@DeclareSymbol{\rhooksearrow}{arrows}{\mathrel}
857 \fdsy@DeclareSymbol{\rightharpoonup}{arrows}{\mathrel}
858 \fdsy@DeclareSymbol{\upharpoonleft}{arrows}{\mathrel}
859 \fdsy@DeclareSymbol{\leftharpoondown}{arrows}{\mathrel}
860 \fdsy@DeclareSymbol{\downharpoonright}{arrows}{\mathrel}
861 \fdsy@DeclareSymbol{\neharpoonnw}{arrows}{\mathrel}
862 \fdsy@DeclareSymbol{\nwharpoonsw}{arrows}{\mathrel}
863 \fdsy@DeclareSymbol{\swharpoonse}{arrows}{\mathrel}
864 \fdsy@DeclareSymbol{\seharpoonne}{arrows}{\mathrel}
865 \fdsy@DeclareSymbol{\rightharpoondown}{arrows}{\mathrel}
866 \fdsy@DeclareSymbol{\upharpoonright}{arrows}{\mathrel}
867 \fdsy@DeclareAlias{\restriction}{arrows}{\mathrel}
868 \fdsy@DeclareSymbol{\leftharpoonup}{arrows}{\mathrel}
869 \fdsy@DeclareSymbol{\downharpoonleft}{arrows}{\mathrel}
870 \fdsy@DeclareSymbol{\neharpoonse}{arrows}{\mathrel}
871 \fdsy@DeclareSymbol{\nwharpoonne}{arrows}{\mathrel}
872 \fdsy@DeclareSymbol{\swharpoonnw}{arrows}{\mathrel}
873 \fdsy@DeclareSymbol{\seharpoonsw}{arrows}{\mathrel}
874 \fdsy@DeclareSymbol{\leftrightharpoonupdown}{arrows}{\mathrel}
875 \fdsy@DeclareSymbol{\updownharpoonleftright}{arrows}{\mathrel}
876 \fdsy@DeclareSymbol{\neswharpoonnwse}{arrows}{\mathrel}
877 \fdsy@DeclareSymbol{\nwseharpoonnesw}{arrows}{\mathrel}
878 \fdsy@DeclareSymbol{\leftrightharpoondownup}{arrows}{\mathrel}
879 \fdsy@DeclareSymbol{\updownharpoonrightleft}{arrows}{\mathrel}
880 \fdsy@DeclareSymbol{\neswharpoonsenw}{arrows}{\mathrel}
881 \fdsy@DeclareSymbol{\nwseharpoonswne}{arrows}{\mathrel}
882 \fdsy@DeclareSymbol{\rightleftharpoons}{arrows}{\mathrel}
883 \fdsy@DeclareSymbol{\updownharpoons}{arrows}{\mathrel}
884 \fdsy@DeclareAlias{\updownharpoonsleftright}{arrows}{\mathrel}
885 \fdsy@DeclareSymbol{\neswharpoons}{arrows}{\mathrel}
886 \fdsy@DeclareSymbol{\senwharpoons}{arrows}{\mathrel}
887 \fdsy@DeclareSymbol{\leftrightharpoons}{arrows}{\mathrel}
888 \fdsy@DeclareSymbol{\downupharpoons}{arrows}{\mathrel}
889 \fdsy@DeclareAlias{\downupharpoonsleftright}{arrows}{\mathrel}
890 \fdsy@DeclareSymbol{\swneharpoons}{arrows}{\mathrel}
891 \fdsy@DeclareSymbol{\nwseharpoons}{arrows}{\mathrel}
892 \fdsy@DeclareSymbol{\rightbkarrow}{arrows}{\mathrel}
893 \fdsy@DeclareAlias{\dasharrow}{arrows}{\mathrel}
894 \fdsy@DeclareAlias{\dashrightarrow}{arrows}{\mathrel}
895 \fdsy@DeclareSymbol{\upbkarrow}{arrows}{\mathrel}
896 \fdsy@DeclareSymbol{\leftbkarrow}{arrows}{\mathrel}
897 \fdsy@DeclareAlias{\dashleftarrow}{arrows}{\mathrel}
898 \fdsy@DeclareSymbol{\downbkarrow}{arrows}{\mathrel}
899 \fdsy@DeclareSymbol{\nebkarrow}{arrows}{\mathrel}
900 \fdsy@DeclareSymbol{\nwbkarrow}{arrows}{\mathrel}

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901 \fdsy@DeclareSymbol{\swbkarrow}{arrows}{\mathrel}
902 \fdsy@DeclareSymbol{\sebkarrow}{arrows}{\mathrel}
903 \fdsy@DeclareSymbol{\rightspoon}{arrows}{\mathrel}
904 \fdsy@DeclareAlias{\multimap}{arrows}{\mathrel}
905 \fdsy@DeclareSymbol{\upspoon}{arrows}{\mathrel}
906 \fdsy@DeclareAlias{\circmid}{arrows}{\mathrel}
907 \fdsy@DeclareSymbol{\leftspoon}{arrows}{\mathrel}
908 \fdsy@DeclareAlias{\multimapinv}{arrows}{\mathrel}
909 \fdsy@DeclareSymbol{\downspoon}{arrows}{\mathrel}
910 \fdsy@DeclareAlias{\midcir}{arrows}{\mathrel}
911 \fdsy@DeclareSymbol{\rightblackspoon}{arrows}{\mathrel}
912 \fdsy@DeclareSymbol{\upblackspoon}{arrows}{\mathrel}
913 \fdsy@DeclareSymbol{\leftblackspoon}{arrows}{\mathrel}
914 \fdsy@DeclareSymbol{\downblackspoon}{arrows}{\mathrel}
915 \fdsy@DeclareSymbol{\rightpitchfork}{arrows}{\mathrel}
916 \fdsy@DeclareSymbol{\uppitchfork}{arrows}{\mathrel}
917 \fdsy@DeclareAlias{\pitchfork}{arrows}{\mathrel}
918 \fdsy@DeclareSymbol{\leftpitchfork}{arrows}{\mathrel}
919 \fdsy@DeclareSymbol{\downpitchfork}{arrows}{\mathrel}
920 \fdsy@DeclareSymbol{\rightrightarrows}{arrows}{\mathrel}
921 \fdsy@DeclareSymbol{\upuparrows}{arrows}{\mathrel}
922 \fdsy@DeclareSymbol{\leftleftarrows}{arrows}{\mathrel}
923 \fdsy@DeclareSymbol{\downdownarrows}{arrows}{\mathrel}
924 \fdsy@DeclareSymbol{\nenearrows}{arrows}{\mathrel}
925 \fdsy@DeclareSymbol{\nwnwarrows}{arrows}{\mathrel}
926 \fdsy@DeclareSymbol{\swswarrows}{arrows}{\mathrel}
927 \fdsy@DeclareSymbol{\sesearrows}{arrows}{\mathrel}
928 \fdsy@DeclareSymbol{\rightleftarrows}{arrows}{\mathrel}
929 \fdsy@DeclareSymbol{\updownarrows}{arrows}{\mathrel}
930 \fdsy@DeclareSymbol{\neswarrows}{arrows}{\mathrel}
931 \fdsy@DeclareSymbol{\nwsearrows}{arrows}{\mathrel}
932 \fdsy@DeclareSymbol{\leftrightharrows}{arrows}{\mathrel}
933 \fdsy@DeclareSymbol{\downuparrows}{arrows}{\mathrel}
934 \fdsy@DeclareSymbol{\swnearrows}{arrows}{\mathrel}
935 \fdsy@DeclareSymbol{\senwarrows}{arrows}{\mathrel}
936 \fdsy@DeclareSymbol{\rightlsquigarrow}{arrows}{\mathrel}
937 \fdsy@DeclareAlias{\leadsto}{arrows}{\mathrel}
938 \fdsy@DeclareAlias{\rightsquigarrow}{arrows}{\mathrel}
939 \fdsy@DeclareSymbol{\uplsquigarrow}{arrows}{\mathrel}
940 \fdsy@DeclareSymbol{\leftlsquigarrow}{arrows}{\mathrel}
941 \fdsy@DeclareSymbol{\downlsquigarrow}{arrows}{\mathrel}
942 \fdsy@DeclareSymbol{\rightrsquigarrow}{arrows}{\mathrel}
943 \fdsy@DeclareSymbol{\uprsquigarrow}{arrows}{\mathrel}
944 \fdsy@DeclareSymbol{\leftrsquigarrow}{arrows}{\mathrel}
945 \fdsy@DeclareAlias{\leftsquigarrow}{arrows}{\mathrel}

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946 \fdsy@DeclareSymbol{\downrsquigarrow}{arrows}{\mathrel}
947 \fdsy@DeclareSymbol{\leftrightsquigarrow}{arrows}{\mathrel}
948 \fdsy@DeclareSymbol{\updownsquigarrow}{arrows}{\mathrel}
949 \fdsy@DeclareSymbol{\rightleftsquigarrow}{arrows}{\mathrel}
950 \fdsy@DeclareSymbol{\downupsquigarrow}{arrows}{\mathrel}
951 \fdsy@DeclareSymbol{\rightlcurvearrow}{arrows}{\mathrel}
952 \fdsy@DeclareAlias{\curvearrowright}{arrows}{\mathrel}
953 \fdsy@DeclareSymbol{\uplcurvearrow}{arrows}{\mathrel}
954 \fdsy@DeclareSymbol{\leftlcurvearrow}{arrows}{\mathrel}
955 \fdsy@DeclareSymbol{\downlcurvearrow}{arrows}{\mathrel}
956 \fdsy@DeclareAlias{\cwrightarcarrow}{arrows}{\mathrel}
957 \fdsy@DeclareSymbol{\nelcurvearrow}{arrows}{\mathrel}
958 \fdsy@DeclareSymbol{\nwlcurvearrow}{arrows}{\mathrel}
959 \fdsy@DeclareSymbol{\swlcurvearrow}{arrows}{\mathrel}
960 \fdsy@DeclareAlias{\cwundercurvearrow}{arrows}{\mathrel}
961 \fdsy@DeclareSymbol{\selcurvearrow}{arrows}{\mathrel}
962 \fdsy@DeclareSymbol{\rightcurvearrow}{arrows}{\mathrel}
963 \fdsy@DeclareAlias{\acwunderarcarrow}{arrows}{\mathrel}
964 \fdsy@DeclareSymbol{\uprcurvearrow}{arrows}{\mathrel}
965 \fdsy@DeclareSymbol{\leftrcurvearrow}{arrows}{\mathrel}
966 \fdsy@DeclareAlias{\curvearrowleft}{arrows}{\mathrel}
967 \fdsy@DeclareAlias{\acwoverarcarrow}{arrows}{\mathrel}
968 \fdsy@DeclareSymbol{\downrcurvearrow}{arrows}{\mathrel}
969 \fdsy@DeclareAlias{\acwleftarcarrow}{arrows}{\mathrel}
970 \fdsy@DeclareSymbol{\nercurvearrow}{arrows}{\mathrel}
971 \fdsy@DeclareSymbol{\nwrcurvearrow}{arrows}{\mathrel}
972 \fdsy@DeclareSymbol{\swrcurvearrow}{arrows}{\mathrel}
973 \fdsy@DeclareSymbol{\sercurvearrow}{arrows}{\mathrel}
974 \fdsy@DeclareAlias{\ccwundercurvearrow}{arrows}{\mathrel}
975 \fdsy@DeclareSymbol{\leftrightcurvearrow}{arrows}{\mathrel}
976 \fdsy@DeclareSymbol{\updowncurvearrow}{arrows}{\mathrel}
977 \fdsy@DeclareSymbol{\rightleftcurvearrow}{arrows}{\mathrel}
978 \fdsy@DeclareSymbol{\downupcurvearrow}{arrows}{\mathrel}
979 \fdsy@DeclareSymbol{\neswcurvearrow}{arrows}{\mathrel}
980 \fdsy@DeclareSymbol{\nwsecurvearrow}{arrows}{\mathrel}
981 \fdsy@DeclareSymbol{\swnecurvearrow}{arrows}{\mathrel}
982 \fdsy@DeclareSymbol{\senwcurvearrow}{arrows}{\mathrel}
983 \fdsy@DeclareSymbol{\leftfootline}{arrows}{\mathrel}
984 \fdsy@DeclareAlias{\vlongdash}{arrows}{\mathrel}
985 \fdsy@DeclareSymbol{\rightfootline}{arrows}{\mathrel}
986 \fdsy@DeclareAlias{\longdashv}{arrows}{\mathrel}
987 \fdsy@DeclareSymbol{\acwcircularrowup}{arrows}{\mathrel}
988 \fdsy@DeclareSymbol{\acwcircularrowleft}{arrows}{\mathrel}
989 \fdsy@DeclareAlias{\circularrowleft}{arrows}{\mathrel}
990 \fdsy@DeclareAlias{\acwopencircularrow}{arrows}{\mathrel}

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991 \fdsy@DeclareSymbol{\acwcirculararrowdown}{arrows}{\mathrel}
992 \fdsy@DeclareAlias{\acwgapcirculararrow}{arrows}{\mathrel}
993 \fdsy@DeclareSymbol{\acwcirculararrowright}{arrows}{\mathrel}
994 \fdsy@DeclareSymbol{\cwcirculararrowdown}{arrows}{\mathrel}
995 \fdsy@DeclareAlias{\cwgapcirculararrow}{arrows}{\mathrel}
996 \fdsy@DeclareSymbol{\cwcirculararrowright}{arrows}{\mathrel}
997 \fdsy@DeclareAlias{\circulararrowright}{arrows}{\mathrel}
998 \fdsy@DeclareAlias{\cwopencirculararrow}{arrows}{\mathrel}
999 \fdsy@DeclareSymbol{\cwcirculararrowup}{arrows}{\mathrel}
1000 \fdsy@DeclareSymbol{\cwcirculararrowleft}{arrows}{\mathrel}
1001 \fdsy@DeclareSymbol{\Rrightarrow}{arrows}{\mathrel}
1002 \fdsy@DeclareSymbol{\Uparrow}{arrows}{\mathrel}
1003 \fdsy@DeclareSymbol{\Lleftarrow}{arrows}{\mathrel}
1004 \fdsy@DeclareSymbol{\Ddownarrow}{arrows}{\mathrel}
1005 \fdsy@DeclareSymbol{\Lsh}{arrows}{\mathrel}
1006 \fdsy@DeclareSymbol{\Rsh}{arrows}{\mathrel}
1007 \fdsy@DeclareSymbol{\Ldsh}{arrows}{\mathrel}
1008 \fdsy@DeclareSymbol{\Rdsh}{arrows}{\mathrel}
1009 \fdsy@DeclareSymbol{\looparrowright}{arrows}{\mathrel}
1010 \fdsy@DeclareSymbol{\looparrowleft}{arrows}{\mathrel}
1011 \fdsy@setslot{224}
1012 \fdsy@DeclareSymbol{\rightvdash}{arrows}{\mathrel}
1013 \fdsy@DeclareAlias{\vdash}{arrows}{\mathrel}
1014 \fdsy@DeclareAlias{\assert}{arrows}{\mathrel}
1015 \fdsy@DeclareSymbol{\upvdash}{arrows}{\mathrel}
1016 \fdsy@DeclareAlias{\perp}{arrows}{\mathrel}
1017 \fdsy@DeclareSymbol{\leftvdash}{arrows}{\mathrel}
1018 \fdsy@DeclareAlias{\dashv}{arrows}{\mathrel}
1019 \fdsy@DeclareSymbol{\downvdash}{arrows}{\mathrel}
1020 \fdsy@DeclareSymbol{\rightvDash}{arrows}{\mathrel}
1021 \fdsy@DeclareAlias{\vDash}{arrows}{\mathrel}
1022 \fdsy@DeclareAlias{\models}{arrows}{\mathrel}
1023 \fdsy@DeclareSymbol{\upvDash}{arrows}{\mathrel}
1024 \fdsy@DeclareAlias{\Vbar}{arrows}{\mathrel}
1025 \fdsy@DeclareSymbol{\leftvDash}{arrows}{\mathrel}
1026 \fdsy@DeclareAlias{\Dashv}{arrows}{\mathrel}
1027 \fdsy@DeclareSymbol{\downvDash}{arrows}{\mathrel}
1028 \fdsy@DeclareAlias{\barV}{arrows}{\mathrel}
1029 \fdsy@DeclareSymbol{\rightVdash}{arrows}{\mathrel}
1030 \fdsy@DeclareAlias{\Vdash}{arrows}{\mathrel}
1031 \fdsy@DeclareSymbol{\upVdash}{arrows}{\mathrel}
1032 \fdsy@DeclareSymbol{\leftVdash}{arrows}{\mathrel}
1033 \fdsy@DeclareAlias{\dashV}{arrows}{\mathrel}
1034 \fdsy@DeclareSymbol{\downVdash}{arrows}{\mathrel}
1035 \fdsy@DeclareSymbol{\rightVDash}{arrows}{\mathrel}

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1036 \fdsy@DeclareAlias{\VDash}{arrows}{\mathrel}
1037 \fdsy@DeclareSymbol{\upVDash}{arrows}{\mathrel}
1038 \fdsy@DeclareSymbol{\leftVDash}{arrows}{\mathrel}
1039 \fdsy@DeclareAlias{\DashV}{arrows}{\mathrel}
1040 \fdsy@DeclareSymbol{\downVDash}{arrows}{\mathrel}
1041 \fdsy@DeclareSymbol{\Vvdash}{arrows}{\mathrel}
1042
1043 \DeclareRobustCommand{\relbar}{\mathrel{\smash{-}}}
1044 \DeclareRobustCommand{\Relbar}{\mathrel{=}}
1045 \let\joinrel\undefined
1046 \DeclareRobustCommand\joinrel{\mathrel{\mkern-4mu}}
1047 \DeclareRobustCommand\longrightarrow{\DOTSB\relbar\joinrel\rightarrow}
1048 \DeclareRobustCommand\longleftarrow{\DOTSB\leftarrow\joinrel\relbar}
1049 \DeclareRobustCommand\longleftrightarrow{\DOTSB\leftarrow\joinrel\rightarrow}
1050 \DeclareRobustCommand\Longrightarrow{\DOTSB\Relbar\joinrel\Rightarrow}
1051 \DeclareRobustCommand\Longleftarrow{\DOTSB\Leftarrow\joinrel\Relbar}
1052 \DeclareRobustCommand\Longleftrightarrow{\DOTSB\Leftarrow\joinrel\Rightarrow}
1053 \DeclareRobustCommand\longmapsto{\DOTSB\leftfootline\mkern-7mu\rightarrow}
1054 \DeclareRobustCommand\emptyblackspoon{\DOTSB\leftspoon\mkern-13mu\rightblackspoon}
1055 \let\origof\emptyblackspoon
1056 \DeclareRobustCommand\filledemptyspoon{\DOTSB\leftblackspoon\mkern-13mu\rightspoon}
1057 \let\imageof\filledemptyspoon
1058 \DeclareRobustCommand\leftrightspoon{\DOTSB\leftspoon\mkern-13mu\rightspoon}
1059 \let\dualmap\leftrightspoon
1060 \DeclareRobustCommand\leftrightblackspoon{\DOTSB\leftblackspoon\mkern-13mu\rightblackspoon}

FdSymbolD: stroked arrows
1061 \fdsy@setslot{0}
1062 \fdsy@DeclareSymbol{\nrightarrow}{narrows}{\mathrel}
1063 \fdsy@DeclareAlias{\nto}{narrows}{\mathrel}
1064 \fdsy@DeclareSymbol{\nuparrow}{narrows}{\mathrel}
1065 \fdsy@DeclareSymbol{\nleftarrow}{narrows}{\mathrel}
1066 \fdsy@DeclareAlias{\ngets}{narrows}{\mathrel}
1067 \fdsy@DeclareSymbol{\ndownarrow}{narrows}{\mathrel}
1068 \fdsy@DeclareSymbol{\nnearrow}{narrows}{\mathrel}
1069 \fdsy@DeclareSymbol{\nnwarrow}{narrows}{\mathrel}
1070 \fdsy@DeclareSymbol{\nswarrow}{narrows}{\mathrel}
1071 \fdsy@DeclareSymbol{\nsearrow}{narrows}{\mathrel}
1072 \fdsy@DeclareSymbol{\nrightarrow}{narrows}{\mathrel}
1073 \fdsy@DeclareSymbol{\nUparrow}{narrows}{\mathrel}
1074 \fdsy@DeclareSymbol{\nLeftarrow}{narrows}{\mathrel}
1075 \fdsy@DeclareSymbol{\nDownarrow}{narrows}{\mathrel}
1076 \fdsy@DeclareSymbol{\nNearrow}{narrows}{\mathrel}
1077 \fdsy@DeclareSymbol{\nNwarrow}{narrows}{\mathrel}
1078 \fdsy@DeclareSymbol{\nSwarrow}{narrows}{\mathrel}
1079 \fdsy@DeclareSymbol{\nSearrow}{narrows}{\mathrel}

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1080 \fdsy@DeclareSymbol{\nlefttrightharrow}{narrows}{\mathrel}
1081 \fdsy@DeclareSymbol{\nupdownarrow}{narrows}{\mathrel}
1082 \fdsy@DeclareSymbol{\nneswarrow}{narrows}{\mathrel}
1083 \fdsy@DeclareSymbol{\nnwsearrow}{narrows}{\mathrel}
1084 \fdsy@DeclareSymbol{\nLefttrightharrow}{narrows}{\mathrel}
1085 \fdsy@DeclareSymbol{\nUpdownarrow}{narrows}{\mathrel}
1086 \fdsy@DeclareSymbol{\nNeswarrow}{narrows}{\mathrel}
1087 \fdsy@DeclareSymbol{\nNwsearrow}{narrows}{\mathrel}
1088 \fdsy@DeclareSymbol{\ntwoheadrightarrow}{narrows}{\mathrel}
1089 \fdsy@DeclareSymbol{\ntwoheaduparrow}{narrows}{\mathrel}
1090 \fdsy@DeclareSymbol{\ntwoheadleftarrow}{narrows}{\mathrel}
1091 \fdsy@DeclareSymbol{\ntwoheaddownarrow}{narrows}{\mathrel}
1092 \fdsy@DeclareSymbol{\ntwoheadnearrow}{narrows}{\mathrel}
1093 \fdsy@DeclareSymbol{\ntwoheadnwarrow}{narrows}{\mathrel}
1094 \fdsy@DeclareSymbol{\ntwoheadswarrow}{narrows}{\mathrel}
1095 \fdsy@DeclareSymbol{\ntwoheadsearrow}{narrows}{\mathrel}
1096 \fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
1097 \fdsy@DeclareSymbol{\nuparrowtail}{narrows}{\mathrel}
1098 \fdsy@DeclareSymbol{\nleftarrowtail}{narrows}{\mathrel}
1099 \fdsy@DeclareSymbol{\ndownarrowtail}{narrows}{\mathrel}
1100 \fdsy@DeclareSymbol{\nnearrowtail}{narrows}{\mathrel}
1101 \fdsy@DeclareSymbol{\nnwarrowtail}{narrows}{\mathrel}
1102 \fdsy@DeclareSymbol{\nswarrowtail}{narrows}{\mathrel}
1103 \fdsy@DeclareSymbol{\nsearrowtail}{narrows}{\mathrel}
1104 \fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
1105 \fdsy@DeclareAlias{\nmapsto}{narrows}{\mathrel}
1106 \fdsy@DeclareSymbol{\nupmapsto}{narrows}{\mathrel}
1107 \fdsy@DeclareAlias{\nmapsup}{narrows}{\mathrel}
1108 \fdsy@DeclareSymbol{\nleftmapsto}{narrows}{\mathrel}
1109 \fdsy@DeclareAlias{\nmapsfrom}{narrows}{\mathrel}
1110 \fdsy@DeclareSymbol{\ndownmapsto}{narrows}{\mathrel}
1111 \fdsy@DeclareAlias{\nmapsdown}{narrows}{\mathrel}
1112 \fdsy@DeclareSymbol{\nnemapsto}{narrows}{\mathrel}
1113 \fdsy@DeclareSymbol{\nnwmapsto}{narrows}{\mathrel}
1114 \fdsy@DeclareSymbol{\nswmapsto}{narrows}{\mathrel}
1115 \fdsy@DeclareSymbol{\nsemapsto}{narrows}{\mathrel}
1116 \fdsy@DeclareSymbol{\nlhookrightarrow}{narrows}{\mathrel}
1117 \fdsy@DeclareAlias{\nhookrightarrow}{narrows}{\mathrel}
1118 \fdsy@DeclareSymbol{\nlhookuparrow}{narrows}{\mathrel}
1119 \fdsy@DeclareSymbol{\nlhookleftarrow}{narrows}{\mathrel}
1120 \fdsy@DeclareSymbol{\nlhookdownarrow}{narrows}{\mathrel}
1121 \fdsy@DeclareSymbol{\nlhooknearrow}{narrows}{\mathrel}
1122 \fdsy@DeclareSymbol{\nlhooknwarrow}{narrows}{\mathrel}
1123 \fdsy@DeclareAlias{\nhknwarrow}{narrows}{\mathrel}
1124 \fdsy@DeclareSymbol{\nlhookswarrow}{narrows}{\mathrel}

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1125 \fdsy@DeclareSymbol{\nlhooksearrow}{narrows}{\mathrel}
1126 \fdsy@DeclareAlias{\nhksearrow}{narrows}{\mathrel}
1127 \fdsy@DeclareSymbol{\nrhookrightarrow}{narrows}{\mathrel}
1128 \fdsy@DeclareSymbol{\nrhookuparrow}{narrows}{\mathrel}
1129 \fdsy@DeclareSymbol{\nrhookleftarrow}{narrows}{\mathrel}
1130 \fdsy@DeclareAlias{\nhhookleftarrow}{narrows}{\mathrel}
1131 \fdsy@DeclareSymbol{\nrhookdownarrow}{narrows}{\mathrel}
1132 \fdsy@DeclareSymbol{\nrhooknearrow}{narrows}{\mathrel}
1133 \fdsy@DeclareAlias{\nhknearrow}{narrows}{\mathrel}
1134 \fdsy@DeclareSymbol{\nrhooknwarrow}{narrows}{\mathrel}
1135 \fdsy@DeclareSymbol{\nrhookswarrow}{narrows}{\mathrel}
1136 \fdsy@DeclareAlias{\nhkswarrow}{narrows}{\mathrel}
1137 \fdsy@DeclareSymbol{\nrhooksearrow}{narrows}{\mathrel}
1138 \fdsy@DeclareSymbol{\nrightharpoonup}{narrows}{\mathrel}
1139 \fdsy@DeclareSymbol{\nupharpoonleft}{narrows}{\mathrel}
1140 \fdsy@DeclareSymbol{\nleftharpoondown}{narrows}{\mathrel}
1141 \fdsy@DeclareSymbol{\ndownharpoonright}{narrows}{\mathrel}
1142 \fdsy@DeclareSymbol{\nneharpoonnw}{narrows}{\mathrel}
1143 \fdsy@DeclareSymbol{\nnwharpoonsw}{narrows}{\mathrel}
1144 \fdsy@DeclareSymbol{\nswharpoonse}{narrows}{\mathrel}
1145 \fdsy@DeclareSymbol{\nseharpoonne}{narrows}{\mathrel}
1146 \fdsy@DeclareSymbol{\nrightharpoondown}{narrows}{\mathrel}
1147 \fdsy@DeclareSymbol{\nupharpoonright}{narrows}{\mathrel}
1148 \fdsy@DeclareAlias{\nrestriction}{narrows}{\mathrel}
1149 \fdsy@DeclareSymbol{\nleftharpoonup}{narrows}{\mathrel}
1150 \fdsy@DeclareSymbol{\ndownharpoonleft}{narrows}{\mathrel}
1151 \fdsy@DeclareSymbol{\nneharpoonse}{narrows}{\mathrel}
1152 \fdsy@DeclareSymbol{\nnwharpoonne}{narrows}{\mathrel}
1153 \fdsy@DeclareSymbol{\nswharpoonnw}{narrows}{\mathrel}
1154 \fdsy@DeclareSymbol{\nseharpoonsw}{narrows}{\mathrel}
1155 \fdsy@DeclareSymbol{\nleftrightharpoonupdown}{narrows}{\mathrel}
1156 \fdsy@DeclareSymbol{\nupdownharpoonleftright}{narrows}{\mathrel}
1157 \fdsy@DeclareSymbol{\nneswharpoonnwse}{narrows}{\mathrel}
1158 \fdsy@DeclareSymbol{\nnwseharpoonnesw}{narrows}{\mathrel}
1159 \fdsy@DeclareSymbol{\nleftrightharpoondownup}{narrows}{\mathrel}
1160 \fdsy@DeclareSymbol{\nupdownharpoonrightleft}{narrows}{\mathrel}
1161 \fdsy@DeclareSymbol{\nneswharpoonsenw}{narrows}{\mathrel}
1162 \fdsy@DeclareSymbol{\nnwseharpoonswne}{narrows}{\mathrel}
1163 \fdsy@DeclareSymbol{\nrightharpoons}{narrows}{\mathrel}
1164 \fdsy@DeclareSymbol{\nupdownharpoons}{narrows}{\mathrel}
1165 \fdsy@DeclareAlias{\nupdownharpoonsleftright}{narrows}{\mathrel}
1166 \fdsy@DeclareSymbol{\nneswharpoons}{narrows}{\mathrel}
1167 \fdsy@DeclareSymbol{\nsenwharpoons}{narrows}{\mathrel}
1168 \fdsy@DeclareSymbol{\nleftrightharpoons}{narrows}{\mathrel}
1169 \fdsy@DeclareSymbol{\ndownupharpoons}{narrows}{\mathrel}

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1170 \fdsy@DeclareAlias{\ndownupharpoonsleftright}{narrows}{\mathrel}
1171 \fdsy@DeclareSymbol{\nswneharpoons}{narrows}{\mathrel}
1172 \fdsy@DeclareSymbol{\nnwseharpoons}{narrows}{\mathrel}
1173 \fdsy@DeclareSymbol{\nrightbkarrow}{narrows}{\mathrel}
1174 \fdsy@DeclareAlias{\ndasharrow}{narrows}{\mathrel}
1175 \fdsy@DeclareAlias{\ndashrightarrow}{narrows}{\mathrel}
1176 \fdsy@DeclareSymbol{\nupbkarrow}{narrows}{\mathrel}
1177 \fdsy@DeclareSymbol{\nleftbkarrow}{narrows}{\mathrel}
1178 \fdsy@DeclareAlias{\ndashleftarrow}{narrows}{\mathrel}
1179 \fdsy@DeclareSymbol{\ndownbkarrow}{narrows}{\mathrel}
1180 \fdsy@DeclareSymbol{\nnebkarrow}{narrows}{\mathrel}
1181 \fdsy@DeclareSymbol{\nnwbkarrow}{narrows}{\mathrel}
1182 \fdsy@DeclareSymbol{\nswbkarrow}{narrows}{\mathrel}
1183 \fdsy@DeclareSymbol{\nsebkarrow}{narrows}{\mathrel}
1184 \fdsy@DeclareSymbol{\nrightspoon}{narrows}{\mathrel}
1185 \fdsy@DeclareAlias{\nmultimap}{narrows}{\mathrel}
1186 \fdsy@DeclareSymbol{\nupspoon}{narrows}{\mathrel}
1187 \fdsy@DeclareAlias{\ncirmid}{narrows}{\mathrel}
1188 \fdsy@DeclareSymbol{\nleftspoon}{narrows}{\mathrel}
1189 \fdsy@DeclareAlias{\nmultimapinv}{narrows}{\mathrel}
1190 \fdsy@DeclareSymbol{\ndownspoon}{narrows}{\mathrel}
1191 \fdsy@DeclareAlias{\nmidcir}{narrows}{\mathrel}
1192 \fdsy@DeclareSymbol{\nrightblackspoon}{narrows}{\mathrel}
1193 \fdsy@DeclareSymbol{\nupblackspoon}{narrows}{\mathrel}
1194 \fdsy@DeclareSymbol{\nleftblackspoon}{narrows}{\mathrel}
1195 \fdsy@DeclareSymbol{\ndownblackspoon}{narrows}{\mathrel}
1196 \fdsy@DeclareSymbol{\nrightpitchfork}{narrows}{\mathrel}
1197 \fdsy@DeclareSymbol{\nuppitchfork}{narrows}{\mathrel}
1198 \fdsy@DeclareAlias{\npitchfork}{narrows}{\mathrel}
1199 \fdsy@DeclareSymbol{\nleftpitchfork}{narrows}{\mathrel}
1200 \fdsy@DeclareSymbol{\ndownpitchfork}{narrows}{\mathrel}
1201 \fdsy@DeclareSymbol{\nrightrightarrows}{narrows}{\mathrel}
1202 \fdsy@DeclareSymbol{\nupuparrows}{narrows}{\mathrel}
1203 \fdsy@DeclareSymbol{\nleftleftarrows}{narrows}{\mathrel}
1204 \fdsy@DeclareSymbol{\ndowndownarrows}{narrows}{\mathrel}
1205 \fdsy@DeclareSymbol{\nnenearrows}{narrows}{\mathrel}
1206 \fdsy@DeclareSymbol{\nnwnwarrows}{narrows}{\mathrel}
1207 \fdsy@DeclareSymbol{\nswswarrows}{narrows}{\mathrel}
1208 \fdsy@DeclareSymbol{\nsesearrows}{narrows}{\mathrel}
1209 \fdsy@DeclareSymbol{\nrightleftarrows}{narrows}{\mathrel}
1210 \fdsy@DeclareSymbol{\nupdownarrows}{narrows}{\mathrel}
1211 \fdsy@DeclareSymbol{\nneswarrows}{narrows}{\mathrel}
1212 \fdsy@DeclareSymbol{\nnwsearrows}{narrows}{\mathrel}
1213 \fdsy@DeclareSymbol{\nleftrightarrows}{narrows}{\mathrel}
1214 \fdsy@DeclareSymbol{\ndownuparrows}{narrows}{\mathrel}

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1215 \fdsy@DeclareSymbol{\nswnearrows}{narrows}{\mathrel}
1216 \fdsy@DeclareSymbol{\nsenwarrows}{narrows}{\mathrel}
1217 \fdsy@DeclareSymbol{\nrightrightarrow}{narrows}{\mathrel}
1218 \fdsy@DeclareAlias{\nleadsto}{narrows}{\mathrel}
1219 \fdsy@DeclareAlias{\nrightrightarrow}{narrows}{\mathrel}
1220 \fdsy@DeclareSymbol{\nuprightarrow}{narrows}{\mathrel}
1221 \fdsy@DeclareSymbol{\nlefttrightarrow}{narrows}{\mathrel}
1222 \fdsy@DeclareSymbol{\ndownrightarrow}{narrows}{\mathrel}
1223 \fdsy@DeclareSymbol{\nrightrightarrow}{narrows}{\mathrel}
1224 \fdsy@DeclareSymbol{\nuprightarrow}{narrows}{\mathrel}
1225 \fdsy@DeclareSymbol{\nlefttrightarrow}{narrows}{\mathrel}
1226 \fdsy@DeclareAlias{\nlefttrightarrow}{narrows}{\mathrel}
1227 \fdsy@DeclareSymbol{\ndownrightarrow}{narrows}{\mathrel}
1228 \fdsy@DeclareSymbol{\nlefttrightarrow}{narrows}{\mathrel}
1229 \fdsy@DeclareSymbol{\nupdownarrow}{narrows}{\mathrel}
1230 \fdsy@DeclareSymbol{\nrightrightarrow}{narrows}{\mathrel}
1231 \fdsy@DeclareSymbol{\ndownupward}{narrows}{\mathrel}
1232 \fdsy@DeclareSymbol{\nrightrightarrow}{narrows}{\mathrel}
1233 \fdsy@DeclareAlias{\ncurlyarrowright}{narrows}{\mathrel}
1234 \fdsy@DeclareSymbol{\nupcurlyarrow}{narrows}{\mathrel}
1235 \fdsy@DeclareSymbol{\nleftcurlyarrow}{narrows}{\mathrel}
1236 \fdsy@DeclareSymbol{\ndowncurlyarrow}{narrows}{\mathrel}
1237 \fdsy@DeclareAlias{\ncwrigtharccarrow}{narrows}{\mathrel}
1238 \fdsy@DeclareSymbol{\nnelcurlyarrow}{narrows}{\mathrel}
1239 \fdsy@DeclareSymbol{\nnwcurlyarrow}{narrows}{\mathrel}
1240 \fdsy@DeclareSymbol{\nswcurlyarrow}{narrows}{\mathrel}
1241 \fdsy@DeclareAlias{\ncwundercurlyarrow}{narrows}{\mathrel}
1242 \fdsy@DeclareSymbol{\nsecurlyarrow}{narrows}{\mathrel}
1243 \fdsy@DeclareSymbol{\nrightrightarrow}{narrows}{\mathrel}
1244 \fdsy@DeclareAlias{\nacwunderarccarrow}{narrows}{\mathrel}
1245 \fdsy@DeclareSymbol{\nupcurlyarrow}{narrows}{\mathrel}
1246 \fdsy@DeclareSymbol{\nleftcurlyarrow}{narrows}{\mathrel}
1247 \fdsy@DeclareAlias{\ncurlyarrowleft}{narrows}{\mathrel}
1248 \fdsy@DeclareAlias{\nacwoverarccarrow}{narrows}{\mathrel}
1249 \fdsy@DeclareSymbol{\ndowncurlyarrow}{narrows}{\mathrel}
1250 \fdsy@DeclareAlias{\nacwleftarccarrow}{narrows}{\mathrel}
1251 \fdsy@DeclareSymbol{\nnercurlyarrow}{narrows}{\mathrel}
1252 \fdsy@DeclareSymbol{\nnwcurlyarrow}{narrows}{\mathrel}
1253 \fdsy@DeclareSymbol{\nswcurlyarrow}{narrows}{\mathrel}
1254 \fdsy@DeclareSymbol{\nsercurlyarrow}{narrows}{\mathrel}
1255 \fdsy@DeclareAlias{\nccwundercurlyarrow}{narrows}{\mathrel}
1256 \fdsy@DeclareSymbol{\nlefttrightarrow}{narrows}{\mathrel}
1257 \fdsy@DeclareSymbol{\nupdowncurlyarrow}{narrows}{\mathrel}
1258 \fdsy@DeclareSymbol{\nrightrightarrow}{narrows}{\mathrel}
1259 \fdsy@DeclareSymbol{\ndownupcurlyarrow}{narrows}{\mathrel}

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1260 \fdsy@DeclareSymbol{\nneswcurvearrow}{narrows}{\mathrel}
1261 \fdsy@DeclareSymbol{\nnwsecurvearrow}{narrows}{\mathrel}
1262 \fdsy@DeclareSymbol{\nswnecurvearrow}{narrows}{\mathrel}
1263 \fdsy@DeclareSymbol{\nsenwcurvearrow}{narrows}{\mathrel}
1264 \fdsy@DeclareSymbol{\nleftfootline}{narrows}{\mathrel}
1265 \fdsy@DeclareAlias{\nvlongdash}{narrows}{\mathrel}
1266 \fdsy@DeclareSymbol{\nrightfootline}{narrows}{\mathrel}
1267 \fdsy@DeclareAlias{\nlongdashv}{narrows}{\mathrel}
1268 \fdsy@DeclareSymbol{\nacwcirculararrowup}{narrows}{\mathrel}
1269 \fdsy@DeclareSymbol{\nacwcirculararrowleft}{narrows}{\mathrel}
1270 \fdsy@DeclareAlias{\ncirculararrowleft}{narrows}{\mathrel}
1271 \fdsy@DeclareAlias{\nacwopencirculararrow}{narrows}{\mathrel}
1272 \fdsy@DeclareSymbol{\nacwcirculararrowdown}{narrows}{\mathrel}
1273 \fdsy@DeclareAlias{\nacwgapcirculararrow}{narrows}{\mathrel}
1274 \fdsy@DeclareSymbol{\nacwcirculararrowright}{narrows}{\mathrel}
1275 \fdsy@DeclareSymbol{\ncwcirculararrowdown}{narrows}{\mathrel}
1276 \fdsy@DeclareAlias{\ncwgapcirculararrow}{narrows}{\mathrel}
1277 \fdsy@DeclareSymbol{\ncwcirculararrowright}{narrows}{\mathrel}
1278 \fdsy@DeclareAlias{\ncirculararrowright}{narrows}{\mathrel}
1279 \fdsy@DeclareAlias{\ncwopencirculararrow}{narrows}{\mathrel}
1280 \fdsy@DeclareSymbol{\ncwcirculararrowup}{narrows}{\mathrel}
1281 \fdsy@DeclareSymbol{\ncwcirculararrowleft}{narrows}{\mathrel}
1282 \fdsy@DeclareSymbol{\nRrightarrow}{narrows}{\mathrel}
1283 \fdsy@DeclareSymbol{\nUparrow}{narrows}{\mathrel}
1284 \fdsy@DeclareSymbol{\nLleftarrow}{narrows}{\mathrel}
1285 \fdsy@DeclareSymbol{\nDdownarrow}{narrows}{\mathrel}
1286 \fdsy@setslot{224}
1287 \fdsy@DeclareSymbol{\nrightvdash}{narrows}{\mathrel}
1288 \fdsy@DeclareAlias{\nvdash}{narrows}{\mathrel}
1289 \fdsy@DeclareAlias{\nassert}{narrows}{\mathrel}
1290 \fdsy@DeclareSymbol{\nupvdash}{narrows}{\mathrel}
1291 \fdsy@DeclareAlias{\nperp}{narrows}{\mathrel}
1292 \fdsy@DeclareSymbol{\nleftvdash}{narrows}{\mathrel}
1293 \fdsy@DeclareAlias{\ndashv}{narrows}{\mathrel}
1294 \fdsy@DeclareSymbol{\ndownvdash}{narrows}{\mathrel}
1295 \fdsy@DeclareSymbol{\nrightvDash}{narrows}{\mathrel}
1296 \fdsy@DeclareAlias{\nvDash}{narrows}{\mathrel}
1297 \fdsy@DeclareAlias{\nmodels}{narrows}{\mathrel}
1298 \fdsy@DeclareSymbol{\nupvDash}{narrows}{\mathrel}
1299 \fdsy@DeclareAlias{\nVbar}{narrows}{\mathrel}
1300 \fdsy@DeclareSymbol{\nleftvDash}{narrows}{\mathrel}
1301 \fdsy@DeclareAlias{\nDashv}{narrows}{\mathrel}
1302 \fdsy@DeclareSymbol{\ndownvDash}{narrows}{\mathrel}
1303 \fdsy@DeclareAlias{\nbarV}{narrows}{\mathrel}
1304 \fdsy@DeclareSymbol{\nrightVdash}{narrows}{\mathrel}

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1305 \fdsy@DeclareAlias{\nVdash}{narrows}{\mathrel}
1306 \fdsy@DeclareSymbol{\nupVdash}{narrows}{\mathrel}
1307 \fdsy@DeclareSymbol{\nleftVdash}{narrows}{\mathrel}
1308 \fdsy@DeclareAlias{\ndashV}{narrows}{\mathrel}
1309 \fdsy@DeclareSymbol{\ndownVdash}{narrows}{\mathrel}
1310 \fdsy@DeclareSymbol{\nrightVdash}{narrows}{\mathrel}
1311 \fdsy@DeclareAlias{\nVDash}{narrows}{\mathrel}
1312 \fdsy@DeclareSymbol{\nupVDash}{narrows}{\mathrel}
1313 \fdsy@DeclareSymbol{\nleftVDash}{narrows}{\mathrel}
1314 \fdsy@DeclareAlias{\nDashV}{narrows}{\mathrel}
1315 \fdsy@DeclareSymbol{\ndownVDash}{narrows}{\mathrel}

FdSymbolE: large operators
1316 \fdsy@setslot{0}
1317 \fdsy@DeclareSymbol{\tbigplus}{largesymbols}{\mathop}
1318 \fdsy@DeclareSymbol{\dbigplus}{largesymbols}{\mathop}
1319 \fdsy@DeclareSymbol{\tbigtimes}{largesymbols}{\mathop}
1320 \fdsy@DeclareSymbol{\dbigtimes}{largesymbols}{\mathop}
1321 \fdsy@DeclareSymbol{\tbigwedge}{largesymbols}{\mathop}
1322 \fdsy@DeclareSymbol{\dbigwedge}{largesymbols}{\mathop}
1323 \fdsy@DeclareSymbol{\tbigvee}{largesymbols}{\mathop}
1324 \fdsy@DeclareSymbol{\dbigvee}{largesymbols}{\mathop}
1325 \fdsy@DeclareSymbol{\tbigwedgedot}{largesymbols}{\mathop}
1326 \fdsy@DeclareSymbol{\dbigwedgedot}{largesymbols}{\mathop}
1327 \fdsy@DeclareSymbol{\tbigveedot}{largesymbols}{\mathop}
1328 \fdsy@DeclareSymbol{\dbigveedot}{largesymbols}{\mathop}
1329 \fdsy@DeclareSymbol{\tbigdoublewedge}{largesymbols}{\mathop}
1330 \fdsy@DeclareAlias{\tconjquant}{largesymbols}{\mathop}
1331 \fdsy@DeclareSymbol{\dbigdoublewedge}{largesymbols}{\mathop}
1332 \fdsy@DeclareAlias{\dconjquant}{largesymbols}{\mathop}
1333 \fdsy@DeclareSymbol{\tbigdoublevee}{largesymbols}{\mathop}
1334 \fdsy@DeclareAlias{\tdisjquant}{largesymbols}{\mathop}
1335 \fdsy@DeclareSymbol{\dbigdoublevee}{largesymbols}{\mathop}
1336 \fdsy@DeclareAlias{\ddisjquant}{largesymbols}{\mathop}
1337 \fdsy@DeclareSymbol{\tbigcurlywedge}{largesymbols}{\mathop}
1338 \fdsy@DeclareSymbol{\dbigcurlywedge}{largesymbols}{\mathop}
1339 \fdsy@DeclareSymbol{\tbigcurlyvee}{largesymbols}{\mathop}
1340 \fdsy@DeclareSymbol{\dbigcurlyvee}{largesymbols}{\mathop}
1341 \fdsy@DeclareSymbol{\tbigcurlywedgedot}{largesymbols}{\mathop}
1342 \fdsy@DeclareSymbol{\dbigcurlywedgedot}{largesymbols}{\mathop}
1343 \fdsy@DeclareSymbol{\tbigcurlyveedot}{largesymbols}{\mathop}
1344 \fdsy@DeclareSymbol{\dbigcurlyveedot}{largesymbols}{\mathop}
1345 \fdsy@DeclareSymbol{\tbigdoublecurlywedge}{largesymbols}{\mathop}
1346 \fdsy@DeclareSymbol{\dbigdoublecurlywedge}{largesymbols}{\mathop}
1347 \fdsy@DeclareSymbol{\tbigdoublecurlyvee}{largesymbols}{\mathop}
1348 \fdsy@DeclareSymbol{\dbigdoublecurlyvee}{largesymbols}{\mathop}

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1349 \fdsy@DeclareSymbol{\tbigcap}{largesymbols}{\mathop}
1350 \fdsy@DeclareSymbol{\dbigcap}{largesymbols}{\mathop}
1351 \fdsy@DeclareSymbol{\tbigcup}{largesymbols}{\mathop}
1352 \fdsy@DeclareSymbol{\dbigcup}{largesymbols}{\mathop}
1353 \fdsy@DeclareSymbol{\tbigcapdot}{largesymbols}{\mathop}
1354 \fdsy@DeclareSymbol{\dbigcapdot}{largesymbols}{\mathop}
1355 \fdsy@DeclareSymbol{\tbigcupdot}{largesymbols}{\mathop}
1356 \fdsy@DeclareSymbol{\dbigcupdot}{largesymbols}{\mathop}
1357 \fdsy@DeclareSymbol{\tbigcapplus}{largesymbols}{\mathop}
1358 \fdsy@DeclareSymbol{\dbigcapplus}{largesymbols}{\mathop}
1359 \fdsy@DeclareSymbol{\tbigcupplus}{largesymbols}{\mathop}
1360 \fdsy@DeclareAlias{\tbiguplus}{largesymbols}{\mathop}
1361 \fdsy@DeclareSymbol{\dbigcupplus}{largesymbols}{\mathop}
1362 \fdsy@DeclareAlias{\dbiguplus}{largesymbols}{\mathop}
1363 \fdsy@DeclareSymbol{\tbigsqcap}{largesymbols}{\mathop}
1364 \fdsy@DeclareSymbol{\dbigsqcap}{largesymbols}{\mathop}
1365 \fdsy@DeclareSymbol{\tbigsqcup}{largesymbols}{\mathop}
1366 \fdsy@DeclareSymbol{\dbigsqcup}{largesymbols}{\mathop}
1367 \fdsy@DeclareSymbol{\tbigsqcapdot}{largesymbols}{\mathop}
1368 \fdsy@DeclareSymbol{\dbigsqcapdot}{largesymbols}{\mathop}
1369 \fdsy@DeclareSymbol{\tbigsqcupdot}{largesymbols}{\mathop}
1370 \fdsy@DeclareSymbol{\dbigsqcupdot}{largesymbols}{\mathop}
1371 \fdsy@DeclareSymbol{\tbigsqcapplus}{largesymbols}{\mathop}
1372 \fdsy@DeclareSymbol{\dbigsqcapplus}{largesymbols}{\mathop}
1373 \fdsy@DeclareSymbol{\tbigsqcupplus}{largesymbols}{\mathop}
1374 \fdsy@DeclareSymbol{\dbigsqcupplus}{largesymbols}{\mathop}
1375 \fdsy@DeclareSymbol{\tbigoplus}{largesymbols}{\mathop}
1376 \fdsy@DeclareSymbol{\dbigoplus}{largesymbols}{\mathop}
1377 \fdsy@DeclareSymbol{\tbigotimes}{largesymbols}{\mathop}
1378 \fdsy@DeclareSymbol{\dbigotimes}{largesymbols}{\mathop}
1379 \fdsy@DeclareSymbol{\tbigodot}{largesymbols}{\mathop}
1380 \fdsy@DeclareSymbol{\dbigodot}{largesymbols}{\mathop}
1381 \fdsy@DeclareSymbol{\tbigooast}{largesymbols}{\mathop}
1382 \fdsy@DeclareSymbol{\dbigoast}{largesymbols}{\mathop}
1383 \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
1384 \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
1385 \fdsy@DeclareSymbol{\tcoproduct}{largesymbols}{\mathop}
1386 \fdsy@DeclareSymbol{\dcoproduct}{largesymbols}{\mathop}
1387 \fdsy@DeclareSymbol{\tsum}{largesymbols}{\mathop}
1388 \fdsy@DeclareSymbol{\dsum}{largesymbols}{\mathop}
1389 \fdsy@DeclareSymbol{\tosum}{largesymbols}{\mathop}
1390 \fdsy@DeclareSymbol{\dosum}{largesymbols}{\mathop}
1391 \fdsy@DeclareSymbol{\tint}{largesymbols}{\mathop}
1392 \fdsy@DeclareSymbol{\dint}{largesymbols}{\mathop}
1393 \fdsy@DeclareSymbol{\tiint}{largesymbols}{\mathop}

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1394 \fdsy@DeclareSymbol{\diint}{largesymbols}{\mathop}
1395 \fdsy@DeclareSymbol{\tiiint}{largesymbols}{\mathop}
1396 \fdsy@DeclareSymbol{\diiint}{largesymbols}{\mathop}
1397 \fdsy@DeclareSymbol{\tiiiint}{largesymbols}{\mathop}
1398 \fdsy@DeclareSymbol{\diiiint}{largesymbols}{\mathop}
1399 \fdsy@DeclareSymbol{\tidotsint}{largesymbols}{\mathop}
1400 \fdsy@DeclareAlias{\tdotsint}{largesymbols}{\mathop}
1401 \fdsy@DeclareSymbol{\didotsint}{largesymbols}{\mathop}
1402 \fdsy@DeclareAlias{\ddotsint}{largesymbols}{\mathop}
1403 \fdsy@DeclareSymbol{\tlandupint}{largesymbols}{\mathop}
1404 \fdsy@DeclareAlias{\tintclockwise}{largesymbols}{\mathop}
1405 \fdsy@DeclareSymbol{\dlandupint}{largesymbols}{\mathop}
1406 \fdsy@DeclareAlias{\dintclockwise}{largesymbols}{\mathop}
1407 \fdsy@DeclareSymbol{\tlanddownint}{largesymbols}{\mathop}
1408 \fdsy@DeclareAlias{\tawint}{largesymbols}{\mathop}
1409 \fdsy@DeclareAlias{\tintctr clockwise}{largesymbols}{\mathop}
1410 \fdsy@DeclareSymbol{\dlanddownint}{largesymbols}{\mathop}
1411 \fdsy@DeclareAlias{\dawint}{largesymbols}{\mathop}
1412 \fdsy@DeclareAlias{\dintctr clockwise}{largesymbols}{\mathop}
1413 \fdsy@DeclareSymbol{\tintbar}{largesymbols}{\mathop}
1414 \fdsy@DeclareSymbol{\dintbar}{largesymbols}{\mathop}
1415 \fdsy@DeclareSymbol{\tintBar}{largesymbols}{\mathop}
1416 \fdsy@DeclareSymbol{\dintBar}{largesymbols}{\mathop}
1417 \fdsy@DeclareSymbol{\tfint}{largesymbols}{\mathop}
1418 \fdsy@DeclareSymbol{\dfint}{largesymbols}{\mathop}
1419 \fdsy@DeclareSymbol{\toint}{largesymbols}{\mathop}
1420 \fdsy@DeclareSymbol{\doint}{largesymbols}{\mathop}
1421 \fdsy@DeclareSymbol{\toiint}{largesymbols}{\mathop}
1422 \fdsy@DeclareSymbol{\doiint}{largesymbols}{\mathop}
1423 \fdsy@DeclareSymbol{\toiiint}{largesymbols}{\mathop}
1424 \fdsy@DeclareSymbol{\doiiiint}{largesymbols}{\mathop}
1425 \fdsy@DeclareSymbol{\trcircularrightint}{largesymbols}{\mathop}
1426 \fdsy@DeclareAlias{\tointctr clockwise}{largesymbols}{\mathop}
1427 \fdsy@DeclareSymbol{\drcircularrightint}{largesymbols}{\mathop}
1428 \fdsy@DeclareAlias{\dointctr clockwise}{largesymbols}{\mathop}
1429 \fdsy@DeclareSymbol{\tlcircularrightint}{largesymbols}{\mathop}
1430 \fdsy@DeclareAlias{\tvaroint clockwise}{largesymbols}{\mathop}
1431 \fdsy@DeclareSymbol{\dlcircularrightint}{largesymbols}{\mathop}
1432 \fdsy@DeclareAlias{\dvaroint clockwise}{largesymbols}{\mathop}
1433 \fdsy@DeclareSymbol{\trcircleleftint}{largesymbols}{\mathop}
1434 \fdsy@DeclareAlias{\tvarointctr clockwise}{largesymbols}{\mathop}
1435 \fdsy@DeclareSymbol{\drcircleleftint}{largesymbols}{\mathop}
1436 \fdsy@DeclareAlias{\dvarointctr clockwise}{largesymbols}{\mathop}
1437 \fdsy@DeclareSymbol{\tlcircleleftint}{largesymbols}{\mathop}
1438 \fdsy@DeclareAlias{\tointclockwise}{largesymbols}{\mathop}

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1439 \fdsy@DeclareSymbol{\dlcircleleftint}{largesymbols}{\mathop}
1440 \fdsy@DeclareAlias{\dointclockwise}{largesymbols}{\mathop}
1441 \fdsy@DeclareSymbol{\tsumint}{largesymbols}{\mathop}
1442 \fdsy@DeclareSymbol{\dsumint}{largesymbols}{\mathop}
1443 \let\intop\tint
1444 \let\ointop\toint
1445
1446 \fdsy@DeclareOperator{\bigplus}{\dbigplus}{\tbigplus}
1447 \fdsy@DeclareOperator{\bigtimes}{\dbigtimes}{\tbigtimes}
1448 \fdsy@DeclareOperator{\bigwedge}{\dbigwedge}{\tbigwedge}
1449 \fdsy@DeclareOperator{\bigvee}{\dbigvee}{\tbigvee}
1450 \fdsy@DeclareOperator{\bigwedgedot}{\dbigwedgedot}{\tbigwedgedot}
1451 \fdsy@DeclareOperator{\bigveedot}{\dbigveedot}{\tbigveedot}
1452 \fdsy@DeclareOperator{\bigdoublewedge}{\dbigdoublewedge}{\tbigdoublewedge}
1453 \fdsy@DeclareOperator{\conjquant}{\dconjquant}{\tconjquant}
1454 \fdsy@DeclareOperator{\bigdoublevee}{\dbigdoublevee}{\tbigdoublevee}
1455 \fdsy@DeclareOperator{\disjquant}{\ddisjquant}{\tdisjquant}
1456 \fdsy@DeclareOperator{\bigcurlywedge}{\dbigcurlywedge}{\tbigcurlywedge}
1457 \fdsy@DeclareOperator{\bigcurlyvee}{\dbigcurlyvee}{\tbigcurlyvee}
1458 \fdsy@DeclareOperator{\bigcurlywedgedot}{\dbigcurlywedgedot}{\tbigcurlywedgedot}
1459 \fdsy@DeclareOperator{\bigcurlyveedot}{\dbigcurlyveedot}{\tbigcurlyveedot}
1460 \fdsy@DeclareOperator{\bigdoublecurlywedge}{\dbigdoublecurlywedge}{\tbigdoublecurlywedge}
1461 \fdsy@DeclareOperator{\bigdoublecurlyvee}{\dbigdoublecurlyvee}{\tbigdoublecurlyvee}
1462 \fdsy@DeclareOperator{\bigcap}{\dbigcap}{\tbigcap}
1463 \fdsy@DeclareOperator{\bigcup}{\dbigcup}{\tbigcup}
1464 \fdsy@DeclareOperator{\bigcapdot}{\dbigcapdot}{\tbigcapdot}
1465 \fdsy@DeclareOperator{\bigcupdot}{\dbigcupdot}{\tbigcupdot}
1466 \fdsy@DeclareOperator{\bigcapplus}{\dbigcapplus}{\tbigcapplus}
1467 \fdsy@DeclareOperator{\bigcupplus}{\dbigcupplus}{\tbigcupplus}
1468 \fdsy@DeclareOperator{\biguplus}{\dbiguplus}{\tbiguplus}
1469 \fdsy@DeclareOperator{\bigsqcap}{\dbigsqcap}{\tbigsqcap}
1470 \fdsy@DeclareOperator{\bigsqcup}{\dbigsqcup}{\tbigsqcup}
1471 \fdsy@DeclareOperator{\bigsqcapdot}{\dbigsqcapdot}{\tbigsqcapdot}
1472 \fdsy@DeclareOperator{\bigsqcupdot}{\dbigsqcupdot}{\tbigsqcupdot}
1473 \fdsy@DeclareOperator{\bigsqcapplus}{\dbigsqcapplus}{\tbigsqcapplus}
1474 \fdsy@DeclareOperator{\bigsqcupplus}{\dbigsqcupplus}{\tbigsqcupplus}
1475 \fdsy@DeclareOperator{\bigoplus}{\dbigoplus}{\tbigoplus}
1476 \fdsy@DeclareOperator{\bigotimes}{\dbigotimes}{\tbigotimes}
1477 \fdsy@DeclareOperator{\bigodot}{\dbigodot}{\tbigodot}
1478 \fdsy@DeclareOperator{\bigooast}{\dbigoast}{\tbigooast}
1479 \fdsy@DeclareOperator{\sum}{\dsum}{\tsum}
1480 \fdsy@DeclareOperator{\osum}{\dosum}{\tosum}
1481 \fdsy@DeclareOperator{\prod}{\dprod}{\tprod}
1482 \fdsy@DeclareOperator{\coprod}{\dcoprod}{\tcoprod}
1483 \fdsy@DeclareIntegral{\iint}{\diint}{\tiint}

```

```

1484 \fdsy@DeclareIntegral{\iiint}{\diiint}{\tiiint}
1485 \fdsy@DeclareIntegral{\iiiiint}{\diiiiint}{\tiiiint}
1486 \fdsy@DeclareIntegral{\idotsint}{\didotsint}{\tidotsint}
1487 \fdsy@DeclareIntegral{\dotsint}{\ddotsint}{\tdotsint}
1488 \fdsy@DeclareIntegral{\landupint}{\dlandupint}{\tlandupint}
1489 \fdsy@DeclareIntegral{\intclockwise}{\dintclockwise}{\tintclockwise}
1490 \fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
1491 \fdsy@DeclareIntegral{\awint}{\dawint}{\tawint}
1492 \fdsy@DeclareIntegral{\intctrcclockwise}{\dintctrcclockwise}{\tintctrcclockwise}
1493 \fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
1494 \fdsy@DeclareIntegral{\intbar}{\dintbar}{\tintbar}
1495 \fdsy@DeclareIntegral{\intBar}{\dintBar}{\tintBar}
1496 \fdsy@DeclareIntegral{\fint}{\dfint}{\tfint}
1497 \fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
1498 \fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
1499 \fdsy@DeclareIntegral{\rcircclerightint}{\drcircclerightint}{\trcircclerightint}
1500 \fdsy@DeclareIntegral{\ointctrcclockwise}{\dointctrcclockwise}{\tointctrcclockwise}
1501 \fdsy@DeclareIntegral{\lcircclerightint}{\dlcircclerightint}{\tlcircclerightint}
1502 \fdsy@DeclareIntegral{\varointclockwise}{\dvarointclockwise}{\tvarointclockwise}
1503 \fdsy@DeclareIntegral{\rcircleleftint}{\drcircleleftint}{\trcircleleftint}
1504 \fdsy@DeclareIntegral{\varointctrcclockwise}{\dvarointctrcclockwise}{\tvarointctrcclockwise}
1505 \fdsy@DeclareIntegral{\lcircleleftint}{\dlcircleleftint}{\tlcircleleftint}
1506 \fdsy@DeclareIntegral{\ointclockwise}{\dointclockwise}{\tointclockwise}
1507 \fdsy@DeclareIntegral{\sumint}{\dsumint}{\tsumint}
1508
1509 \def\intkern@{\mkern-8.5mu\mathchoice{\mkern-1mu}{}}{}{}{}
1510 \def\intdots@{\mkern-6mu%
1511   \mathchoice{\@cdots}%
1512   {{\cdotp}\mkern0.5mu{\cdotp}\mkern0.5mu{\cdotp}}%
1513   {{\cdotp}{\cdotp}{\cdotp}}%
1514   {{\cdotp}{\cdotp}{\cdotp}}%
1515   \mkern-6mu}

Math accents.
1516 \DeclareMathAccent{\widehat}{\mathord}{largesymbols}{"72}
1517 \DeclareMathAccent{\widetilde}{\mathord}{largesymbols}{"78}
1518 \DeclareMathAccent{\wideparen}{\mathord}{largesymbols}{"7E}
1519 \DeclareMathAccent{\vec}{\mathord}{largesymbols}{"84}
1520 \DeclareMathAccent{\middlebar}{\mathord}{largesymbols}{"85}
1521 \DeclareMathAccent{\middleslash}{\mathord}{largesymbols}{"86}
1522 \DeclareMathAccent{\strokethrough}{\mathord}{largesymbols}{"87}

FdSymbolF: delimiters
1523 \let\lfloor\undefined
1524 \let\rfloor\undefined
1525 \let\lceil\undefined
1526 \let\rceil\undefined

```

```

1527 \let\langle\undefined
1528 \let\rangle\undefined
1529 \iffdsy@largedelims
1530 \fdsy@DeclareOpen{()}{delimiters}"01}
1531 \fdsy@DeclareClose{)}{delimiters}"07}
1532 \fdsy@DeclareOpen{\lparen}{delimiters}"01}
1533 \fdsy@DeclareClose{\rparen}{delimiters}"07}
1534 \fdsy@DeclareOpen{[]}{delimiters}"13}
1535 \fdsy@DeclareClose{[]}{delimiters}"19}
1536 \fdsy@DeclareOpen{\lbrack}{delimiters}"13}
1537 \fdsy@DeclareClose{\rbrack}{delimiters}"19}
1538 \fdsy@DeclareOpen{\lfloor}{delimiters}"1F}
1539 \fdsy@DeclareClose{\rfloor}{delimiters}"25}
1540 \fdsy@DeclareOpen{\lceil}{delimiters}"2B}
1541 \fdsy@DeclareClose{\rceil}{delimiters}"31}
1542 \fdsy@DeclareOpen{\ulcorner}{delimiters}"37}
1543 \fdsy@DeclareClose{\urcorner}{delimiters}"3D}
1544 \fdsy@DeclareOpen{\llcorner}{delimiters}"43}
1545 \fdsy@DeclareClose{\lrcorner}{delimiters}"49}
1546 \fdsy@DeclareOpen{\ulcorner}{delimiters}"4F}
1547 \fdsy@DeclareClose{\ulcorner}{delimiters}"55}
1548 \fdsy@DeclareOpen{\lsem}{delimiters}"61}
1549 \fdsy@DeclareClose{\rsem}{delimiters}"67}
1550 \fdsy@DeclareOpen{\lBrack}{delimiters}"61}
1551 \fdsy@DeclareClose{\rBrack}{delimiters}"67}
1552 \fdsy@DeclareOpen{\lbrace}{delimiters}"73}
1553 \fdsy@DeclareClose{\rbrace}{delimiters}"79}
1554 \fdsy@DeclareOpen{<}{delimiters}"86}
1555 \fdsy@DeclareClose{>}{delimiters}"8C}
1556 \fdsy@DeclareOpen{\langle}{delimiters}"86}
1557 \fdsy@DeclareClose{\rangle}{delimiters}"8C}
1558 \fdsy@DeclareOpen{\lAngle}{delimiters}"92}
1559 \fdsy@DeclareClose{\rAngle}{delimiters}"98}
1560 \fdsy@DeclareOpen{\langledot}{delimiters}"9E}
1561 \fdsy@DeclareClose{\rangledot}{delimiters}"A4}
1562 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}"AA}
1563 \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}"AA}
1564 \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}"AA}
1565 \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}"B0}
1566 \expandafter\DeclareMathDelimiter\@backslashchar%
1567 {\mathord}{delimiters}"B0}{delimiters}"B0}
1568 \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}"B0}
1569 \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}"B7}
1570 \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}"B7}
1571 \fdsy@DeclareOpen{\lvert}{delimiters}"B7}

```

```

1572 \fdsy@DeclareClose{\rvert}{delimiters}{B7}
1573 \DeclareMathSymbol{\mid}{\mathrel}{delimiters}{B7}
1574 \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}{BA}
1575 \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}{BE}
1576 \fdsy@DeclareOpen{\lVert}{delimiters}{BE}
1577 \fdsy@DeclareClose{\rVert}{delimiters}{BE}
1578 \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}{BE}
1579 \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}{C1}
1580 \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}{C4}
1581 \fdsy@DeclareOpen{\lVvert}{delimiters}{C4}
1582 \fdsy@DeclareClose{\rVvert}{delimiters}{C4}
1583 \else
1584 \fdsy@DeclareOpen{(){delimiters}{00}
1585 \fdsy@DeclareClose{}}{delimiters}{06}
1586 \fdsy@DeclareOpen{\lparen}{delimiters}{00}
1587 \fdsy@DeclareClose{\rparen}{delimiters}{06}
1588 \fdsy@DeclareOpen{[]}{delimiters}{12}
1589 \fdsy@DeclareClose{[]}{delimiters}{18}
1590 \fdsy@DeclareOpen{\lbrack}{delimiters}{12}
1591 \fdsy@DeclareClose{\rbrack}{delimiters}{18}
1592 \fdsy@DeclareOpen{\lfloor}{delimiters}{1E}
1593 \fdsy@DeclareClose{\rfloor}{delimiters}{24}
1594 \fdsy@DeclareOpen{\lceil}{delimiters}{2A}
1595 \fdsy@DeclareClose{\rceil}{delimiters}{30}
1596 \fdsy@DeclareOpen{\ulcorner}{delimiters}{36}
1597 \fdsy@DeclareClose{\urcorner}{delimiters}{3C}
1598 \fdsy@DeclareOpen{\llcorner}{delimiters}{42}
1599 \fdsy@DeclareClose{\lrcorner}{delimiters}{48}
1600 \fdsy@DeclareOpen{\ulcorner}{delimiters}{4E}
1601 \fdsy@DeclareClose{\ulcorner}{delimiters}{54}
1602 \fdsy@DeclareOpen{\lsem}{delimiters}{60}
1603 \fdsy@DeclareClose{\rsem}{delimiters}{66}
1604 \fdsy@DeclareOpen{\lBrack}{delimiters}{60}
1605 \fdsy@DeclareClose{\rBrack}{delimiters}{66}
1606 \fdsy@DeclareOpen{\lbrace}{delimiters}{72}
1607 \fdsy@DeclareClose{\rbrace}{delimiters}{78}
1608 \fdsy@DeclareOpen{<}{delimiters}{85}
1609 \fdsy@DeclareClose{>}{delimiters}{8B}
1610 \fdsy@DeclareOpen{\langle}{delimiters}{85}
1611 \fdsy@DeclareClose{\rangle}{delimiters}{8B}
1612 \fdsy@DeclareOpen{\lAngle}{delimiters}{91}
1613 \fdsy@DeclareClose{\rAngle}{delimiters}{97}
1614 \fdsy@DeclareOpen{\langedot}{delimiters}{9D}
1615 \fdsy@DeclareClose{\rangedot}{delimiters}{A3}
1616 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}{A9}

```

```

1617 \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}{A9}
1618 \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}{A9}
1619 \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}{AF}
1620 \expandafter\DeclareMathDelimiter\@backslashchar%
1621   {\mathord}{delimiters}{AF}{delimiters}{AF}
1622 \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}{AF}
1623 \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}{B6}
1624 \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}{B6}
1625 \fdsy@DeclareOpen{\lvert}{delimiters}{B6}
1626 \fdsy@DeclareClose{\rvert}{delimiters}{B6}
1627 \DeclareMathSymbol{\mid}{\mathrel}{delimiters}{B6}
1628 \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}{B9}
1629 \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}{BD}
1630 \fdsy@DeclareOpen{\lVert}{delimiters}{BD}
1631 \fdsy@DeclareClose{\rVert}{delimiters}{BD}
1632 \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}{BD}
1633 \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}{C0}
1634 \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}{C3}
1635 \fdsy@DeclareOpen{\lVvert}{delimiters}{C3}
1636 \fdsy@DeclareClose{\rVvert}{delimiters}{C3}
1637 \fi
1638 \let\|\Vert
1639 \let\divides\nmid
1640 \let\ndivides\nmid
1641 \DeclareMathSymbol{\shortmid}{\mathrel}{delimiters}{B5}
1642 \DeclareMathSymbol{\nshortmid}{\mathrel}{delimiters}{B8}
1643 \DeclareMathSymbol{\shortparallel}{\mathrel}{delimiters}{BC}
1644 \DeclareMathSymbol{\nshortparallel}{\mathrel}{delimiters}{BF}
1645 \fdsy@DeclareDelimiter{\arrowvert}{\mathord}{delimiters}{BB}
1646 \fdsy@DeclareDelimiter{\Arrowvert}{\mathord}{delimiters}{C2}
1647 \fdsy@DeclareClose{\lgroupp}{delimiters}{7E}
1648 \fdsy@DeclareOpen{\rgroupp}{delimiters}{7F}
1649 \fdsy@DeclareClose{\rmoustache}{delimiters}{80}
1650 \fdsy@DeclareOpen{\lmoustache}{delimiters}{81}
1651 \fdsy@DeclareDelimiter{\bracevert}{\mathord}{delimiters}{84}
1652 \let\uparrow\undefined
1653 \let\downarrow\undefined
1654 \let\updownarrow\undefined
1655 \let\Uparrow\undefined
1656 \let\Downarrow\undefined
1657 \let\Updownarrow\undefined
1658 \DeclareMathDelimiter{\uparrow}{\mathrel}{arrows}{01}{delimiters}{C6}
1659 \DeclareMathDelimiter{\downarrow}{\mathrel}{arrows}{03}{delimiters}{C7}
1660 \DeclareMathDelimiter{\updownarrow}{\mathrel}{arrows}{11}{delimiters}{C8}
1661 \DeclareMathDelimiter{\Uparrow}{\mathrel}{arrows}{09}{delimiters}{C9}

```

```

1662 \DeclareMathDelimiter{\Downarrow}{\mathrel}{arrows}{"0B}{delimiters}{"CA}
1663 \DeclareMathDelimiter{\Updownarrow}{\mathrel}{arrows}{"15}{delimiters}{"CB}

```

Horizontal braces.

```

1664 \DeclareMathSymbol{\bracedl}{\mathord}{delimiters}{"CC}
1665 \DeclareMathSymbol{\bracerl}{\mathord}{delimiters}{"CD}
1666 \DeclareMathSymbol{\bracerd}{\mathord}{delimiters}{"CE}
1667 \DeclareMathSymbol{\braceru}{\mathord}{delimiters}{"CF}
1668 \DeclareMathSymbol{\bracemd}{\mathord}{delimiters}{"D0}
1669 \DeclareMathSymbol{\bracemu}{\mathord}{delimiters}{"D1}
1670 \DeclareMathSymbol{\bracemid}{\mathord}{delimiters}{"D2}
1671
1672 \def\bracefill@#1#2#3#4#5{$\m@th#5#1\leaders\hbox{$#4$}\hfill#2\leaders\hbox{$#4$}\hfill#3$}
1673 \def\downbracefill@{\bracefill@\bracedl\bracemd\bracerd\bracemid}
1674 \def\upbracefill@{\bracefill@\bracerl\bracemu\braceru\bracemid}
1675 \def\downgroupfill@{\bracefill@\bracedl}{\bracerd\bracemid}
1676 \def\upgroupfill@{\bracefill@\bracerl}{\braceru\bracemid}
1677 \def\linesegmentfill@{\arrowfill@\leftfootline\relbar\rightfootline}
1678 \def\leftharpoonfill@{\arrowfill@\leftharpoondown\relbar\relbar}
1679 \def\rightharpoonfill@{\arrowfill@\relbar\relbar\rightharpoonup}
1680
1681 \DeclareRobustCommand{\overbrace}[1]{\mathop{\mathpalette{\overarrow@downbracefill@}{#1}}\limits}
1682 \DeclareRobustCommand{\underbrace}[1]{\mathop{\mathpalette{\underarrow@upbracefill@}{#1}}\limits}
1683 \DeclareRobustCommand{\overgroup}{\mathpalette{\overarrow@downgroupfill@}}
1684 \DeclareRobustCommand{\undergroup}{\mathpalette{\underarrow@upgroupfill@}}
1685 \DeclareRobustCommand{\overlinesegment}{\mathpalette{\overarrow@linesegmentfill@}}
1686 \DeclareRobustCommand{\overleftharpoon}{\mathpalette{\overarrow@leftharpoonfill@}}
1687 \DeclareRobustCommand{\overrightharpoon}{\mathpalette{\overarrow@rightharpoonfill@}}
1688 \DeclareRobustCommand{\underlinesegment}{\mathpalette{\underarrow@linesegmentfill@}}

```

Radical symbols.

```

1689 \iffdsy@largedelims
1690 \DeclareMathRadical{\sqrtsign}{delimiters}{"D4}{delimiters}{"D4}
1691 \DeclareMathSymbol{\surd}{\mathop}{delimiters}{"D4}
1692 \else
1693 \DeclareMathRadical{\sqrtsign}{delimiters}{"D3}{delimiters}{"D3}
1694 \DeclareMathSymbol{\surd}{\mathop}{delimiters}{"D3}
1695 \fi

```

In the n -th root, we don't want the n to come too close to the radical (adopted from package lucimatx).

```

1696 \def\r@@t#1#2{\setbox\z@\hbox{$\m@th#1\sqrt{#2}$}%
1697 \dimen@ \ht\z@ \advance\dimen@-\dp\z@
1698 \mkern5mu\raise.6\dimen@copy\rootbox \mkern-8mu\box\z@}

```

Mathchars.

```

1699 \DeclareMathSymbol{+}{\mathbin}{symbols}{"11}
1700 \DeclareMathSymbol{-}{\mathbin}{symbols}{"0E}

```



```

1701 \DeclareMathSymbol{*}{\mathbin}{symbols}{"93}
1702 \DeclareMathSymbol{:}{\mathrel}{symbols}{"02}
1703 \DeclareMathSymbol{=}{\mathrel}{relations}{"00}
1704 \DeclareMathSymbol{<}{\mathrel}{relations}{"22}
1705 \DeclareMathSymbol{>}{\mathrel}{relations}{"23}
1706 \iffdsy@largedelims
1707 \DeclareMathSymbol{|}{\mathord}{delimiters}{"B6}
1708 \DeclareMathSymbol{(}{\mathopen}{delimiters}{"01}
1709 \DeclareMathSymbol{)}{\mathclose}{delimiters}{"07}
1710 \DeclareMathSymbol{[}{\mathopen}{delimiters}{"13}
1711 \DeclareMathSymbol{]}{\mathclose}{delimiters}{"19}
1712 \DeclareMathSymbol{/}{\mathord}{delimiters}{"AA}
1713 \else
1714 \DeclareMathSymbol{|}{\mathord}{delimiters}{"B5}
1715 \DeclareMathSymbol{(}{\mathopen}{delimiters}{"00}
1716 \DeclareMathSymbol{)}{\mathclose}{delimiters}{"06}
1717 \DeclareMathSymbol{[}{\mathopen}{delimiters}{"12}
1718 \DeclareMathSymbol{]}{\mathclose}{delimiters}{"18}
1719 \DeclareMathSymbol{/}{\mathord}{delimiters}{"A9}
1720 \fi

```

There is no `\not` symbol in `FdSymbol` since all relational symbols come with a stroked companion. For compatibility we define a `\not` command that places a virgule over the following symbol.

```

1721 \def\c@ncel#1#2{\m@th\oalign{$\hfil#1/\hfil$\cr cr$#1#2$}}
1722 \def\not#1{\mathrel{\m@th\mathpalette\c@ncel{#1}}}
1723 \</style>

```