

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 redefined 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 select 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/mnssymbol/>

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

...	<code>\hdots</code>	<code>\mdwhtlozenge</code>
:	<code>\vdots</code>	\blacklozenge
:'	<code>\udots, \adots</code>	\blacklozenge
:..	<code>\ddots</code>	<code>\mdlgblklozenge</code>
:..	<code>\righttherefore</code>	<code>\mdblklozenge</code>
:..	<code>\uptherefore, \therefore</code>	\ominus
:..	<code>\lefttherefore</code>	\star
:..	<code>\downtherefore, \because</code>	\bigstar
::	<code>\sqaredots</code>	∞
-	<code>\neg, \lnot</code>	\bot
-	<code>\backneg, \invnot, \invneg</code>	\top
-	<code>\turnedneg, \turnednot</code>	\angle
-	<code>\turnedbackneg</code>	\measuredangle
\triangle	<code>\largetriangleup</code>	\measuredangle
∇	<code>\largetriangledown</code>	\measuredangle
\emptyset	<code>\emptyset, \diameter,</code> <code>\varnothing</code>	\measuredangle
\varnothing	<code>\varnothing</code>	\sphericalangle
\varnothing	<code>\revemptyset</code>	\sphericalangle
\circ	<code>\largecircle, \lgwhtcircle</code>	\sphericalangle
\bullet	<code>\largeblackcircle</code>	$\revsphericalangle, \gtlpar$
\square	<code>\largesquare, \lgwhtsquare</code>	\sphericalangle
\blacksquare	<code>\largeblacksquare,</code> <code>\lgbksquare</code>	\rightangle
\diamond	<code>\smalllozenge, \smwhtlozenge</code>	\measuredrightangle
\blacklozenge	<code>\smallblacklozenge,</code> <code>\smbblklozenge</code>	\rightangle
\lozenge	<code>\medlozenge, \lozenge,</code> <code>\mdlwgwtlozenge,</code>	\rightangle
		\prime

⋮	\backprime	∅	\Game
✓	\checkmark	∁	\complement
⚡	\lightning, \downzigzagarrow	♭	\flat
◊	\diamondsuit	♮	\natural
◆	\vardiamondsuit	#	\sharp
♡	\heartsuit	ℵ	\aleph
♥	\varheartsuit	beth	\beth
♠	\spadesuit	λ	\gimel
♣	\clubsuit	daleth	\daleth
✠	\maltese	wp	\wp
✡	\starofdavid	/	/, \mathslash
▽	\sector	\`	\backslash
forall	\forall	\backslash	\backslash
exists	\exists		, \vert
nexists	\nexists		\Vert
Finv	\Finv		\Vvert

4.2 Binary operators

·	\cdot	–	\hookdownminus
·	\centerdot	¬	\intprod, \minushookup
..	\hcdotdot	¬	\intprodr, \hookupminus
:	\vcdotdot	×	\leftthreetimes
·	\udotdot	×	\rightthreetimes
·	\ddotdot	×	\dtimes, \btimes
–	–, \minus	×	\rtimes
›	\medslash, \smalldivslash	×	\utimes, \ttimes
＼	\medbackslash, \smallsetminus	×	\ltimes
+	+, \plus	≀	\lrltimes
×	\times	≀	\upbowtie, \hourglass
±	\pm	↷	\rightY
⊤	\mp	↶	\upY
÷	\dotminus	↶	\leftY
÷	\minusdot	↷	\downY
÷	\minusfdots	˄	\wedge, \land
÷	\minusrdots	˅	\vee, \lor
÷	\dotsminusdots	˄	\wedgedot
÷	\dotplus	˅	\veedot
÷	\div	݂	\veebar
*	\divideontimes	݂	\barwedge
¬	\minushookdown	݂	\veedoublebar

$\overline{\wedge}$	<code>\doublebarwedge</code>	∇	<code>\medtriangledown,</code> <code>\triangledown</code>
$\overline{\wedge}$	<code>\doublewedge, \wedgeonwedge</code>	\blacktriangleright	<code>\medblacktriangleright,</code> <code>\blacktriangleright</code>
\overline{w}	<code>\doublevee, \veeonwee</code>	\blacktriangleup	<code>\medblacktriangleup,</code> <code>\blacktriangle</code>
$\overline{\wedge}$	<code>\curlywedge</code>	\blacktriangleleft	<code>\medblacktriangleleft,</code> <code>\blacktriangleleft</code>
\overline{y}	<code>\curlyvee</code>	\blacktriangledown	<code>\medblacktriangledown,</code> <code>\blacktriangledown</code>
$\overline{\wedge}$	<code>\curlywedgedot</code>	\bigtriangleup	<code>\bigtriangleup</code>
\overline{y}	<code>\curlyweedot</code>	\bigtriangledown	<code>\bigtriangledown</code>
$\overline{\wedge}$	<code>\doublecurlywedge</code>	\circ	<code>\smallcircle, \circ,</code> <code>\smwhtcircle</code>
\overline{w}	<code>\doublecurlyvee</code>	\bullet	<code>\smallblackcircle, \bullet,</code> <code>\sblkcircle</code>
\cup	<code>\cup</code>	\circlearrowleft	<code>\medcircle, \mdlgwhtcircle,</code> <code>\mdwhtcircle</code>
\cap	<code>\cap</code>	\bullet	<code>\medblackcircle,</code> <code>\mdlgblkcircle, \mdblkcircle</code>
$\overline{\cup}$	<code>\doublecup, \Cup</code>	\ominus	<code>\ominus</code>
$\overline{\cap}$	<code>\doublecap, \Cap</code>	\circlearrowright	<code>\overt, \circledvert</code>
\cupdot	<code>\cupdot</code>	\oslash	<code>\oslash</code>
\capdot	<code>\capdot</code>	\backslash	<code>\backslash</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>	\circledcirc	<code>\ocirc, \circledcirc</code>
$\overline{\sqcup}$	<code>\doublesqcup, \Sqcup</code>	\circledast	<code>\oast, \circledast</code>
$\overline{\sqcap}$	<code>\doublesqcap, \Sqcap</code>	\odash	<code>\odash, \circleddash</code>
\sqcupdot	<code>\sqcupdot</code>	\oequal	<code>\oequal, \circledequal</code>
\sqcapdot	<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>\sblksquare</code>
\lrcorner	<code>\pullback</code>	\medsquare	<code>\medsquare, \square, \Box,</code> <code>\mdlgwhtsquare, \mdwhtsquare</code>
\lrcorner	<code>\pushout</code>	\blackblacksquare	<code>\medblacksquare,</code> <code>\mdlgblksquare, \mdblksquare</code>
\lhd	<code>\smalltriangleright</code>	\boxminus	<code>\boxminus</code>
\lhd	<code>\smalltriangleup</code>	\boxvert	<code>\boxvert, \boxbar</code>
\lhd	<code>\smalltriangleleft</code>		
\lhd	<code>\smalltriangledown</code>		
\lhd	<code>\smallblacktriangleright</code>		
\lhd	<code>\smallblacktriangleup</code>		
\lhd	<code>\smallblacktriangleleft</code>		
\lhd	<code>\smallblacktriangledown</code>		
\lhd	<code>\medtriangleright,</code> <code>\triangleright</code>		
\lhd	<code>\medtriangleup, \triangle,</code> <code>\vartriangle</code>		
\lhd	<code>\medtriangleleft,</code> <code>\triangleleft</code>		

□	\boxslash, \boxdiag	◊	\diamondbackslash, \diamondbslash
□	\boxbackslash, \boxbslash	◊	\diamondplus
■	\boxplus	◊	\diamondtimes
▣	\boxtimes	◊	\diamonddot, \diamondcdot
□	\boxdot	◊	\diamonddiamond
▣	\boxbox	★	\smallwhitestar, \smwhitestar
◊	\smalldiamond, \diamond,	★	\smallblackstar, \star
	\smwhtdiamond	★	\medwhitestar
◆	\smallblackdiamond,	★	\medblackstar, \medstar
	\blackdiamond, \smbldiamond	*	*, \ast
◊	\meddiamond, \Diamond,	T	\intercal
	\mdlgwdiamond, \mdwhtdiamond	⌚	\wreath, \wr
◆	\medblackdiamond,	II	\amalg
	\mdlgbldiamond, \mdbldiamond	◁	\lhd
◊	\diamondminus	▷	\rhd
◊	\diamondvert	≤	\unlhd
◊	\diamondslash	≥	\unrhd
		/	\divslash
		\	\setminus

4.3 Relations

=	=, \equal, \Relbar	=	\eqdot
:=	\coloneq, \coloneqq	≐	\Doteq
≡	\equiv	≐	\fallingdotseq
~	\sim	≐	\risingdotseq
~	\backsim	~	\smile, \smallsmile
~	\approx	~	\frown, \smallfrown
≈	\triplesim, \approxident	≈	\smilefrown, \asymp
✉	\simeq	✉	\frownsmile, \closure
✉	\backsimeq	≤	\smileeq
✉	\eqsim	≥	\frowneq, \arceq
✉	\cong	≠	\eqcirc
✉	\backcong	≠	\circeq
✉	\dotcong	△	\wedgeeq, \hateq
✉	\approxeq	△	\veeeq
✉	\bumpeq	★	\stareq
✉	\bumpeqq	△	\triangleeq, \triangleq
✉	\Bumpeq	∈	\in
✉	\doteq	∉	\owns, \ni

<	<, \less	⊃	\supset
>	>, \gtr	⊆	\subseteqq
≤	\leq, \leq	⊇	\supseteqq
≥	\geq, \geq	⊑	\subsetneqq
≲	\leqslant	⊒	\supseteqqq
≳	\geqslant	⊏	\Subset
≲	\leqq	⊐	\Supset
≲	\geqq	<	\prec
≲	\lessapprox	>	\succ
≲	\gtrsim	⊸	\preceq
≲	\lessapprox	⊹	\succeq
≲	\gtrapprox	⊸	\preccurlyeq
≲	\lessgtr	⊹	\succcurlyeq
≲	\gtrless	⊸	\preceqq
≲	\lesseqgtr	⊹	\succeqq
≲	\gtreqless	⊸	\precsim
≲	\lesseqgtr	⊹	\succsim
≲	\gtreqless	⊸	\precapprox
≲	\lesseqgtrslant	⊹	\succapprox
≲	\gtreqlesslant	<	\lessdot
≲	\ll	>	\gtrdot
≲	\gg	≤	\leqdot
≲	\lll, \llless	≥	\geqdot
≲	\ggg, \gggtr	≤	\leqslantdot, \lesdot
≲	\lessclosed, \vartriangleleft	≥	\geqslantdot, \gesdot
≲	\gtrclosed, \vartriangleright	⊸	\eqslantless
≲	\leqclosed, \trianglelefteq	⊹	\eqslantgtr
≲	\geqclosed, \trianglerighteq	⊸	\curlyeqprec
≲	\lesscc, \ltcc	⊹	\curlyeqsucc
≲	\gtrcc, \gtcc	~	\thicksim
≲	\leqslcc, \lescc	≈	\thickapprox
≲	\geqslcc, \gescc	→	\rightarrow, \to
⊑	\sqsubset	↑	\uparrow
⊑	\sqsupset	←	\leftarrow, \gets
⊑	\sqsubseteq	↓	\downarrow
⊑	\sqsupseteq	↗	\nearrow
⊑	\sqsupseteqq	↖	\nwarrow
⊑	\sqsupseteqqq	↙	\swarrow
⊑	\Sqsubset	↘	\searrow
⊑	\Sqsupset	⇒	\Rightarrow
⊑	\subset	↑↑	\Uparrow

\Leftarrow	<code>\Leftarrow</code>	\hookleftarrow	<code>\lhookleftarrow</code>
\Downarrow	<code>\Downarrow</code>	\hookdownarrow	<code>\lhookdownarrow</code>
\nearrow	<code>\Nearrow</code>	\hooknearrow	<code>\lhooknearrow</code>
\nwarrow	<code>\Nwarrow</code>	\hooknwarrow	<code>\lhooknwarrow, \hknwarrow</code>
\swarrow	<code>\Swarrow</code>	\hookswarrow	<code>\lhookswarrow</code>
\searrow	<code>\Searrow</code>	\hooksearrow	<code>\lhooksearrow, \hksearrow</code>
\leftrightarrow	<code>\leftrightarrow</code>	\hookrightarrow	<code>\rhookrightarrow</code>
\updownarrow	<code>\updownarrow</code>	\hookuparrow	<code>\rhookuparrow</code>
\nwarrow	<code>\nesarrow</code>	$\hookleftarrow,$	<code>\rhookleftarrow,</code>
\nwarrow	<code>\nwsearrow</code>	\hookleftarrow	<code>\rhookdownarrow</code>
\leftrightarrow	<code>\Leftrightarrow</code>	\hooknearrow	<code>\rhooknearrow, \hknearrow</code>
\updownarrow	<code>\Updownarrow</code>	\hooknwarrow	<code>\rhooknwarrow</code>
\nwarrow	<code>\Nesarrow</code>	\hookswarrow	<code>\rhookswarrow, \hkswarrow</code>
\nwarrow	<code>\Nwsearrow</code>	\hooksearrow	<code>\rhooksearrow</code>
\rightarrowtail	<code>\twoheadrightarrow</code>	\rightharpoonup	<code>\rightharpoonup</code>
\uparrowtail	<code>\twoheaduparrow</code>	\upharpoonleft	<code>\upharpoonleft</code>
\leftarrowtail	<code>\twoheadleftarrow</code>	\leftharpoondown	<code>\leftharpoondown</code>
\downarrowtail	<code>\twoheaddownarrow</code>	\downharpoonright	<code>\downharpoonright</code>
\nearrowtail	<code>\twoheadnearrow</code>	\neharpoonnw	<code>\neharpoonnw</code>
\nwarrowtail	<code>\twoheadnarrow</code>	\nwharpoonsw	<code>\nwharpoonsw</code>
\swarrowtail	<code>\twoheadswarrow</code>	\swharpoonse	<code>\swharpoonse</code>
\searrowtail	<code>\twoheadsearrow</code>	\seharpoonne	<code>\seharpoonne</code>
\rightarrowtail	<code>\rightarrowtail</code>	\rightharpoondown	<code>\rightharpoondown</code>
\uparrowtail	<code>\uparrowtail</code>	$\upharpoonright, \restriction$	<code>\upharpoonright, \restriction</code>
\leftarrowtail	<code>\leftarrowtail</code>	\leftharpoonup	<code>\leftharpoonup</code>
\downarrowtail	<code>\downarrowtail</code>	\downharpoonleft	<code>\downharpoonleft</code>
\nearrowtail	<code>\nearrowtail</code>	\neharpoonse	<code>\neharpoonse</code>
\nwarrowtail	<code>\nwarrowtail</code>	\nwharpoonne	<code>\nwharpoonne</code>
\swarrowtail	<code>\swarrowtail</code>	\swharpoonnw	<code>\swharpoonnw</code>
\searrowtail	<code>\searrowtail</code>	\seharpoonsw	<code>\seharpoonsw</code>
\rightarrowtail	<code>\rightmapsto, \mapsto</code>	\leftrightharpoonupdown	<code>\leftrightharpoonupdown</code>
\uparrowtail	<code>\upmapsto, \mapsup</code>	\updownharpoonleftright	<code>\updownharpoonleftright</code>
\leftarrowtail	<code>\leftmapsto, \mapsfrom</code>	\neswharpoonnwse	<code>\neswharpoonnwse</code>
\downarrowtail	<code>\downmapsto, \mapsdown</code>	\nwseharpoonnesw	<code>\nwseharpoonnesw</code>
\nearrowtail	<code>\nemapsto</code>	$\leftrightharpoonupdownup$	<code>\leftrightharpoonupdownup</code>
\nwarrowtail	<code>\nwmapsto</code>	\updownharpoonrightleft	<code>\updownharpoonrightleft</code>
\swarrowtail	<code>\swmapsto</code>	\neswharpoonsenw	<code>\neswharpoonsenw</code>
\searrowtail	<code>\semapsto</code>	\nwseharpoonswne	<code>\nwseharpoonswne</code>
\rightarrowtail	<code>\lhookrightarrow, \hookrightarrow</code>	\rightleftharpoons	<code>\rightleftharpoons</code>
\uparrowtail	<code>\lhookuparrow</code>		

॥	\updownharpoons,	↖	\nwsearrows
	\updownharpoonsleftright	≤	\leftrightarrows
٪	\neswharpoons	↓↑	\downuparrows
٪	\senwharpoons	↖↙	\swnearrows
≤	\leftrightharpoons	↖↘	\senwarrows
॥	\downupharpoons,	~	\rightlsquigarrow, \leadsto, \rightsquigarrow
	\downupharpoonsleftright	?	\uplsquigarrow
٪	\swneharpoons	~	\leftlsquigarrow
٪	\nwseharpoons	↓↑	\downlsquigarrow
-→	\rightbkarrow, \dashrightarrow,	↓↑	\rightrsquigarrow,
	\dasharrow	↓↑	\uprsquigarrow
↑	\upbkarrow	↓↑	\uplrsquigarrow
←	\leftbkarrow, \dashleftarrow	↓↑	\leftrsquigarrow,
↓	\downbkarrow		\leftsquigarrow
↗	\nebkarrow	↓↑	\downrsquigarrow
↖	\nwbkarrow	↓↑	\leftrightsquigarrow
↖	\swbkarrow	↓↑	\updownsquigarrow
↘	\sebkarrow	↓↑	\rightleftsquigarrow
-→	\rightspoon, \multimap	↓↑	\downupsquigarrow
↑	\upspoon, \circmid	~	\rightlcurvearrow, \curvearrowright
←	\leftspoon, \multimapinv	↖	\uplcurvearrow
↓	\downspoon, \midcir	↖	\leftlcurvearrow
-→	\rightblackspoon	↓↑	\downlcurvearrow, \cwrightarcarrow
↑	\upblackspoon	↖	\nelcurvearrow
←	\leftblackspoon	↖	\nwlcurvearrow
↓	\downblackspoon	↖	\swlcurvearrow, \cwundercurvearrow
↗	\rightpitchfork	↖	\selcurvearrow
↖	\uppitchfork, \pitchfork	↖	\rightrcurvearrow,
↖	\leftpitchfork	↖	\acwunderarcarrow
Ψ	\downpitchfork	↖	\uprcurvearrow
⇒	\rightrightarrows	↖	\leftrccurvearrow,
↑↑	\upuparrows	↖	\curvearrowleft,
⇐	\leftleftarrows	↖	\acwoverarcarrow
⇓	\downdownarrows	↖	\downrcurvearrow, \acwleftarcarrow
↗	\nenearrows	↗	\nercurvearrow
↖↖	\nwnwarrows	↖	\nwrcurvearrow
↖↖	\swwarrows	↖	\swrcurvearrow
↖↖	\sesearrows	↖	
↖↖	\rightleftarrows	↖	
↑↑	\updownarrows	↖	
٪٪	\neswarrows	↖	

↶	\scurvearrow,	↔	\Longleftrightarrow
	\ccwundercurvearrow	→	\longmapsto
↷	\leftrightcurvearrow	⇒	\emptyblackspoon, \origof
↶	\updowncurvearrow	⇒	\filledemptyspoon, \imageof
↷	\rightleftcurvearrow	⇒	\leftrightspoon, \dualmap
↷	\downupcurvearrow	⇒	\leftrightblackspoon
↷	\neswcurvearrow	⊣	\rightvDash, \vdash, \assert
↷	\nwsecurvearrow	⊤	\upvDash, \perp
↷	\swnecurvearrow	⊣	\leftvDash, \dashv
↷	\senwcurvearrow	⊤	\downvDash
⊣	\leftfootline, \vlongdash	⊧	\rightvDash, \vDash, \models
⊣	\rightfootline, \longdashv	⊟	\upvDash, \Vbar
↶	\acwcirclearrowup	⊠	\leftvDash, \Dashv
↶	\acwcirclearrowleft,	⊠	\downvDash, \barV
	\circlearrowleft,	⊠	\rightvDash, \Vdash
	\acwopencirclearrow	⊤	\upvDash
↷	\acwcirclearrowdown,	⊠	\leftvDash, \dashv
	\acwgapcirclearrow	⊤	\downvDash
↷	\acwcirclearrowright	⊧	\rightvDash, \VDash
↶	\cwcirclearrowdown,	⊟	\upvDash
	\cwgapcirclearrow	⊠	\leftvDash, \Dashv
↷	\cwcirclearrowright,	⊠	\downvDash
	\circlearrowright,	⊠	\Vdash
	\cwopencirclearrow	≠	\nequal, \neq, \neq
↷	\cwcirclearrowup	≠	\nequiv
↶	\cwcirclearrowleft	+	\nsim
⇒	\Rrightarrow	+	\nbacksimeq
↑↑	\Uparrow	+	\napprox
⇐	\Lleftarrow	≠	\ntriplesim, \napproxident
↓↓	\Ddownarrow	≠	\nsimeq, \nsimeq
↖	\Lsh	≠	\nbacksimeq
↗	\Rsh	≠	\neqsim
↙	\Ldsh	≠	\ncong
↘	\Rdsh	≠	\nbackcong
↗	\looparrowright	≠	\napproxeq
↖	\looparrowleft	≠	\nbumpseq
→	\longrightarrow	≠	\nbumpqq
←	\longleftarrow	≠	\nBumpqq
↔↔	\longleftrightarrow	≠	\ndoteq
⇒⇒	\Longrightarrow	≠	\neqdot
↔↔	\Longleftarrow	≠	\nDoteq

# \nfallingdotseq	\ngtrclosed, \ntriangleright
# \nrisingdotseq	\nleqclosed, \ntrianglelefteq
+ \nsmile	\ngeqclosed, \ntrianglerighteq
+ \nfrown	\nlesscc, \nltcc
* \nsmilefrown, \nasmp	\ngtrcc, \ngtcc
# \nfrownsmile, \nclosure	\nleqlcc, \nlescc
# \nsmilee	\ngeqlcc, \ngesc
# \nfrowneq, \narceq	\nsqsubset
* \neqcirc	\nsqsupset
# \ncirceq	\nsqsubseteq
# \nwedgeq, \nhateq	\nsqsupseteq
# \nveeeq	\nsqsubseteqqq
# \nstareq	\nsqsupseteqqq
# \ntriangleeq	\nSqsubset
# \nin, \notin	\nSqsupset
# \nowns, \nni	\nssubset
< \nless	\nsupset
> \ngtr	\nsubseteq
# \nleq	\nsupseteq
# \ngeq	\nsubseteqqq
# \nleqlant	\nsupseteqqq
# \ngeqlant	\nSubset
# \nleqq	\nSupset
# \ngeqq	\nprec
# \nlesssim	\nsucc
# \ngtrsim	\npreceq
# \nlessapprox	\nsucceq
# \ngtrapprox	\npreccurlyeq
# \nlessgtr	\nsuccurlyeq
# \ngtrless	\npreceqq
# \nlesseqgtr	\nsucceqq
# \ngtreqless	\nprecsim
# \nlesseqgtrslant	\nsuccsim
# \ngtreqlesslant	\nprecapprox
< \nll	\nlessdot
> \ngg	\ngtrdot
<< \nlll	\nleqdot
>> \nggg	\nleqlantdot, \nlesdot
# \nlessclosed, \ntriangleleft	\ngeqlantdot, \ngesdot

\neqslantless	\nUparrow
\neqslantgtr	\nLeftarrow
\ncurlyeqprec	\nDownarrow
\ncurlyeqsucc	\nNarrow
\simneqq	\nNwarrow
\backsimneqq	\nSwarrow
\lneq	\nSearrow
\gneq	\nleftrightarrow
\lneqq, \lvertneqq	\nupdownarrow
\gneqq, \gvertneqq	\nnesarrow
\lnsim	\nnwsearrow
\gnsim	\nLeftrightarrow
\lnapprox	\nUpdownarrow
\gnapprox	\nNesarrow
\lessneqqgtr	\nNwsearrow
\gtrneqqless	\nTwoheadrightarrow
\sqsubsetneq	\nTwoheaduparrow
\sqsupsetneq	\nTwoheadleftarrow
\sqsubsetneqq	\nTwoheaddownarrow
\sqsupsetneqq	\nTwoheadnearrow
$\subsetneq, \varsubsetneq$	\nTwoheadnarrow
$\supsetneq, \varsupsetneq$	\nTwoheadswarrow
$\subsetneqq, \varsubsetneqq$	\nTwoheadsearrow
$\supsetneqq, \varsupsetneqq$	\nrightarrowtail
\precneq	\nuparrowtail
\succneq	\nleftarrowtail
\precneqq	\ndownarrowtail
\succcneqq	\nnearrowtail
\precnsim	\nnwarrowtail
\succcnsim	\nsarrowtail
\precnapprox	\nsearrowtail
\succcnapprox	$\nrightarrowmapsto, \nmapsto$
$\rightarrow, \nrightarrow, \nto$	\nupmapsto, \nmapsup
\uparrow, \nuparrow	\nleftmapsto, \nmapsfrom
$\leftarrow, \nleftarrow, \ngets$	\ndownmapsto, \nmapsdown
\downarrow, \ndownarrow	\nnmapsto
\nwarrow	\nnwmapsto
\swarrow	\nswmapsto
\searrow	\nsemapsto
$\rightarrow, \nRightarrow$	$\nlhookrightarrow, \nhookrightarrow$

‡	\nlhookuparrow	#	\nrightleftharpoons
↔	\nlhookleftarrow	#	\nupdownharpoons,
†	\nlhookdownarrow		\nupdownharpoonsleftright
⤠	\nlhooknearrow	⤠	\nneswharpoons
⤡	\nlhooknarrow, \nhknarrow	⤠	\nsenwharpoons
⤢	\nlhookswarrow	#	\nleftrightharpoons
⤣	\nlhooksearrow, \nhksearrow	#	\ndownupharpoons,
⤤	\nrhookrightarrow		\ndownupharpoonsleftright
⤥	\nrhookuparrow	⤠	\nswneharpoons
⤦	\nrhookleftarrow,	⤠	\nnwseharpoons
⤧	\nhookleftarrow	⤠	\nrightbkarrows, \ndasharrow,
⤨	\nrhookdownarrow		\ndashrightarrow
⤩	\nrhooknearrow, \nhknarrow	⤧	\nupbkarrow
⤪	\nrhooknarrow	⤧	\nleftbkarrow, \ndashleftarrow
⤫	\nrhookswarrow, \nhkswarrow	⤧	\ndownbkarrow
⤬	\nrhooksearrow	⤧	\nnebkarrow
⤭	\nrightharpoonup	⤧	\nnwbkarrow
⤮	\nupharpoonleft	⤧	\nswbkarrow
⤯	\nleftharpoondown	⤧	\nsebkarrow
⤰	\ndownharpoonright	⤧	\nrightspoon, \nmultimap
⤱	\nneharpoonnw	⤧	\nupspoon, \ncirmid
⤲	\nnwharpoonsw	⤧	\nleftspoon, \nmultimapinv
⤳	\nswharpoonse	⤧	\ndownspoon, \nmidcir
⤴	\nseharpoonne	⤧	\nrightblackspoon
⤵	\nrightharpoondown	⤧	\nupblackspoon
⤶	\nupharpoonright,	⤧	\nleftblackspoon
⤷	\nrestriction	⤧	\ndownblackspoon
⤸	\nleftharpoonup	⤧	\nrightpitchfork
⤹	\ndownharpoonleft	⤧	\nuppitchfork, \npitchfork
⤺	\nneharpoonse	⤧	\nlefftpitchfork
⤻	\nnwharpoonne	⤧	\ndownpitchfork
⤼	\nswharpoonnw	⤧	\nrightrightarrows
⤽	\nseharpoonsw	⤧	\nupuparrows
⤾	\nleftrightharpoonupdown	⤧	\nleftleftarrows
⤿	\nupdownharpoonleftright	⤧	\ndowndownarrows
⤻	\nneswharpoonnwse	⤧	\nnenearrows
⤼	\nnwseharpoonnesw	⤧	\nnwnwarrows
⤽	\nleftrightharpoondownup	⤧	\nswwarrows
⤾	\nupdownharpoonrightleft	⤧	\nsesearrows
⤿	\nneswharpoonsew	⤧	\nrightleftarrows
⤻	\nnwseharpoonswne	⤧	\nupdownarrows

↖	\nneswarrows	↘	\nswrcurvearrow
↖	\nnwsearrows	↙	\nservcurvearrow,
↗	\leftrightarrows		\nccwundercurvearrow
↙	\downuparrows	↙	\leftrightcurvearrow
↖	\nswnearrows	↑	\updowncurvearrow
↖	\nsearrowss	↗	\rightleftcurvearrow
↗	\rightlsquigarrow, \nleadsto,	↓	\downupcurvearrow
	\rightsquigarrow	↗	\nneswcurvearrow
↗	\nuplsquigarrow	↖	\nnwsecurvearrow
↖	\leftlsquigarrow	↗	\nswecurvearrow
↖	\downlslsquigarrow	↖	\nsenwcurvearrow
↖	\rightrlsquigarrow	↗	\nleftfootline, \nvlongdash
↖	\uprlsquigarrow	↗	\rightfootline, \nlongdashv
↖	\leftrlsquigarrow,	↶	\nacwcirclearrowup
	\leftlsquigarrow	↷	\nacwcirclearrowleft,
↖	\downrslsquigarrow		\ncirclearrowleft,
↖	\leftrightsquigarrow		\nacwopencirclearrow
↖	\updownsquigarrow	↶	\nacwcirclearrowdown,
↖	\rightlefttsquigarrow		\nacwgapcirclearrow
↖	\downupsquigarrow	↷	\nacwcirclearrowright
↖	\rightlcurvearrow,	↶	\ncwcirclearrowdown,
	\ncurvearrowright		\ncwgapcirclearrow
↖	\uplcurvearrow	↷	\ncwcirclearrowright,
↖	\leftlcurvearrow		\ncirclearrowright,
↖	\downnlcurvearrow,		\ncwopencirclearrow
	\ncwrightarcarrow	↶	\ncwcirclearrowup
↖	\nnelcurvearrow	↷	\nacwcirclearrowleft
↖	\nnwlcurvearrow	≠	\nRightarrow
↖	\nswlcurvearrow,	↑	\nUparrow
	\ncwundercurvearrow	↓	\nLeftarrow
↖	\nsecurvearrow	↓	\nDownarrow
↖	\rightrcurvearrow,	↗	\rightvdash, \nvdash, \nassert
	\nacwunderarcarrow	↖	\upvdash, \nperp
↖	\uprcurvearrow	↗	\leftvdash, \ndashv
↖	\leftrcurvearrow,	↖	\downvdash
	\ncurvearrowleft,	↗	\rightvDash, \nvDash, \nmodels
	\nacwoverarcarrow	↖	\upvDash, \nVbar
↖	\downrcurvearrow,	↗	\leftvDash, \nDashv
	\nacwleftarcarrow	↖	\downvDash, \nbarV
↖	\nercurvearrow	↗	\rightVdash, \nVdash
↖	\nnwrcurvearrow	↖	\upVdash

⋮	\nleftVdash, \ndashV	⋮	\backpropto, \propfrom
⋮	\ndownVdash	×	\crossing
⋮	\nrightVDash, \nVDash	⋮	\between
⋮	\nupVDash	⋮	\separated
⋮	\nleftVDash, \nDashV	⋮	\shortmid
⋮	\ndownVDash	⋮	\mid, \divides
:	\mathratio	⋮	\nshortmid
:	\Colon	⋮	\nmid, \ndivides
-	\relbar	⋮	\shortparallel
×	\rJoin	⋮	\parallel
×	\lJoin	⋮	\nshortparallel
⋈	\bowtie, \Join	⋮	\nparallel
∞	\proto, \varproto	⋮	

4.4 Punctuation symbols

·	\cdotp	:	\colon, \mathcolon
---	--------	---	--------------------

4.5 Large operators

+	+	\bigplus	⊕	⊕	\bigcapplus
×	×	\bigtimes	⊕	⊕	\bigcupplus, \biguplus
∧	∧	\bigwedge	◻	◻	\bigsqcap
∨	∨	\bigvee	◻	◻	\bigsqcup
∧	∧	\bigwedgedot	◻	◻	\bigsqcapdot
∨	∨	\bigveedot	◻	◻	\bigsqcupdot
ℳ	ℳ	\bigdoublewedge, \conjquant	◻	◻	\bigsqcapplus
ℳ	ℳ	\bigdoublevee, \disjquant	⊕	⊕	\bigsqcupplus
λ	λ	\bigcurlywedge	⊗	⊗	\bigotimes
γ	γ	\bigcurlyvee	○	○	\bigodot
λ	λ	\bigcurlywedgedot	⊗	⊗	\bigoast
γ	γ	\bigcurlyveedot	∏	∏	\prod
ℳ	ℳ	\bigdoublecurlywedge	∏	∏	\coprod
ℳ	ℳ	\bigdoublecurlyvee	Σ	Σ	\sum
∩	∩	\bigcap	Σ	Σ	\osum
∪	∪	\bigcup	∫	∫	\int
∩	∩	\bigcapdot	∫	∫	\iint
∪	∪	\bigcupdot	∫	∫	

4.6 Delimiters and accents

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

$\langle \langle \langle \langle$	\langledot	$\rangle \rangle \rangle \rangle$	\rangledot
$/ / / / /$	/, \mathslash	$\backslash \backslash \backslash \backslash \backslash$	\backslash
$\mid \mid \mid \mid$	\vert, \vert	$\mid \mid \mid \mid$	\lvert, \rvert
$\mid \mid \mid \mid$	\lvert	$\mid \mid \mid \mid$	\rvert
$\mid \mid \mid \mid$	\lVert	$\mid \mid \mid \mid$	\rVert
$\mid \mid \mid \mid$	\Vert, \lvert	$\mid \mid \mid \mid$	\rVert, \rvert
$\mid \mid \mid \mid \mid \mid$	\lVert	$\mid \mid \mid \mid \mid \mid$	\rVert
$\mid \mid \mid \mid \mid \mid$	\Vvert	$\mid \mid \mid \mid \mid \mid$	\vvert
$\mid \mid \mid \mid \mid \mid$	\lVvert	$\mid \mid \mid \mid \mid \mid$	\vLvert
$\mid \mid \mid \mid \mid \mid$	\rVvert	$\mid \mid \mid \mid \mid \mid$	\vRvert
\overbrace{xxx}	\overbrace	\underbrace{xxx}	\underbrace
\overgroup{xxx}	\overgroup	\undergroup{xxx}	\undergroup
\sqrt{b}	\sqrt	\widehat{b}	\widehat
\widetilde{xxx}	\widetilde	\widetilde{xxx}	\widetilde
\wideparen{xxx}	\wideparen	\vec{b}	\vec
		\bar{b}	\middlebar
		\dot{b}	\middleslash
		\not{b}	\strokethrough
		\overline{xxx}	\overlinesegment
		\overleftarrow{xxx}	\overleftharpoon
		\overrightarrow{xxx}	\overrightharpoon
		\underline{xxx}	\underlinesegment

4.7 Faked symbols

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

\dagger	<code>\dagger</code>	\Re	<code>\Re</code>
\ddagger	<code>\ddagger</code>	\Im	<code>\Im</code>
\P	<code>\mathparagraph</code>	\hbar	<code>\hbar</code>
\S	<code>\mathsection</code>	\hslash	<code>\hslash</code>
$\$$	<code>\mathdollar</code>	\circledR	<code>\circledR</code>
£	<code>\mathsterling</code>	\circledS	<code>\circledS</code>
¥	<code>\yen</code>		

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.

<code>\mho</code>	<code>\varkappa</code>	<code>\lhook</code>
<code>\nabla</code>	<code>\Bbbk</code>	<code>\rhook</code>
<code>\eth</code>	<code>\backepsilon</code>	<code>\diagup</code>
<code>\digamma</code>	<code>\mapstochar</code>	<code>\diagdown</code>

5 Implementation

```
1 <*style>
2 \RequirePackage{xkeyval}
```

We use xkeyval's key mechanism to declare all options. The first option 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\fdssy@mweight{Book}
19     \renewcommand\fdssy@msweight{Regular}
20   \fi
21 }
22 \define@choicekey*{fdsymbol.sty}{boldweight}[\@tempa\@tempb]{medium,bold,auto}{%
23   \ifcase\@tempb\relax
24     \renewcommand\fdssy@bweight{Medium}
25     \renewcommand\fdssy@bsweight{Medium}
26   \or
27     \renewcommand\fdssy@bweight{Bold}
28     \renewcommand\fdssy@bsweight{Bold}
29   \or
30     \renewcommand\fdssy@bweight{Medium}
31     \renewcommand\fdssy@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}{\fdssy@text{\textdagger}}
46 \DeclareRobustCommand{\ddagger}{\fdssy@text{\textdaggerdbl}}
47 \DeclareRobustCommand{\mathparagraph}{\fdssy@text{\textparagraph}}
48 \DeclareRobustCommand{\mathsection}{\fdssy@text{\textsection}}
49 \DeclareRobustCommand{\mathdollar}{\fdssy@text{\textdollar}}
50 \DeclareRobustCommand{\mathsterling}{\fdssy@text{\textsterling}}
51 \DeclareRobustCommand{\yen}{\fdssy@text{\textyen}}
52 \DeclareRobustCommand{\circledR}{\fdssy@text{\textcircled{%
53   \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont R}}}}
54 \DeclareRobustCommand{\circledS}{\fdssy@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{\boldsymbol{\sim}}}}
61 \DeclareRobustCommand{\thickapprox}{\mathrel{\text{\boldsymbol{\approx}}}}
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{\oalign{\div\$ \cr \times\$}}}

Unneeded partial symbols.
72 \let\mapstochar\undefined
73 \let\lhook\undefined
74 \let\rhook\undefined

Short hands 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@@DeclarSymbol[4]{\DeclarMathSymbol{#2}{#3}{#4}{#1}}
80 \newcommand\fdsy@DeclarSymbol[3]{%
81   \if\relax\noexpand#1\let#1\undefined\fi
82   \expandafter\fdsy@@DeclarSymbol\expandafter{\the\@tempcnta}{#1}{#3}{#2}%
83   \fdsy@nextslot
84 }
85 \newcommand\fdsy@DeclarAlias[3]{\fdsy@prevslot\fdsy@DeclarSymbol{#1}{#2}{#3}}
86 \newcommand\fdsy@DeclarOperator[3]{\def#1{\DOTSB#3\slimits@}}
87 \newcommand\fdsy@DeclarIntegral[3]{\def#1{\DOTSI#3\ilimits@}}
88 \newcommand\fdsy@DeclarDelimiter[4]{%
89   \if\relax\noexpand#1\let#1\undefined\fi
90   \DeclarMathDelimiter{#1}{#2}{#3}{#4}{#3}{#4}%
91 }
92 \newcommand\fdsy@DeclarOpen[3]{\fdsy@DeclarDelimiter{#1}{\mathopen}{#2}{#3}}
93 \newcommand\fdsy@DeclarClose[3]{\fdsy@DeclarDelimiter{#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 * [\fdfsy@scale] FdSymbolA-\fdfsy@msweight
103     <7.1-> s * [\fdfsy@scale] FdSymbolA-\fdfsy@mweight
104 }){}
105 \DeclareFontShape{U}{FdSymbolA}{b}{n}{
106     <-7.1> s * [\fdfsy@scale] FdSymbolA-\fdfsy@bsweight
107     <7.1-> s * [\fdfsy@scale] FdSymbolA-\fdfsy@bweight
108 }){}
109 \DeclareFontShape{U}{FdSymbolB}{m}{n}{
110     <-7.1> s * [\fdfsy@scale] FdSymbolB-\fdfsy@msweight
111     <7.1-> s * [\fdfsy@scale] FdSymbolB-\fdfsy@mweight
112 }){}
113 \DeclareFontShape{U}{FdSymbolB}{b}{n}{
114     <-7.1> s * [\fdfsy@scale] FdSymbolB-\fdfsy@bsweight
115     <7.1-> s * [\fdfsy@scale] FdSymbolB-\fdfsy@bweight
116 }){}
117 \DeclareFontShape{U}{FdSymbolC}{m}{n}{
118     <-7.1> s * [\fdfsy@scale] FdSymbolC-\fdfsy@msweight
119     <7.1-> s * [\fdfsy@scale] FdSymbolC-\fdfsy@mweight
120 }){}
121 \DeclareFontShape{U}{FdSymbolC}{b}{n}{
122     <-7.1> s * [\fdfsy@scale] FdSymbolC-\fdfsy@bsweight
123     <7.1-> s * [\fdfsy@scale] FdSymbolC-\fdfsy@bweight
124 }){}
125 \DeclareFontShape{U}{FdSymbolD}{m}{n}{
126     <-7.1> s * [\fdfsy@scale] FdSymbolD-\fdfsy@msweight
127     <7.1-> s * [\fdfsy@scale] FdSymbolD-\fdfsy@mweight
128 }){}
129 \DeclareFontShape{U}{FdSymbolD}{b}{n}{
130     <-7.1> s * [\fdfsy@scale] FdSymbolD-\fdfsy@bsweight
131     <7.1-> s * [\fdfsy@scale] FdSymbolD-\fdfsy@bweight
132 }){}
133 \DeclareFontShape{U}{FdSymbolE}{m}{n}{
134     <-7.1> s * [\fdfsy@scale] FdSymbolE-\fdfsy@msweight
135     <7.1-> s * [\fdfsy@scale] FdSymbolE-\fdfsy@mweight
136 }){}
137 \DeclareFontShape{U}{FdSymbolE}{b}{n}{
138     <-7.1> s * [\fdfsy@scale] FdSymbolE-\fdfsy@bsweight
139     <7.1-> s * [\fdfsy@scale] FdSymbolE-\fdfsy@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{\hddotdot}{symbols}{\mathbin}
176 \fdsy@DeclareSymbol{\vddotdot}{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{\hddots}{symbols}{\mathord}

```

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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{\dotsminusdots}{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}

```

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228 \fdsy@DeclareSymbol{\rightthreetimes}{symbols}{\mathbin}
229 \fdsy@DeclareSymbol{\dtimes}{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{\curlywedgecdot}{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}

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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{\smalltriangleright}{symbols}{\mathbin}
288 \fdsy@DeclareSymbol{\smalltriangledown}{symbols}{\mathbin}
289 \fdsy@DeclareSymbol{\smallblacktriangleright}{symbols}{\mathbin}
290 \fdsy@DeclareSymbol{\smallblacktriangleup}{symbols}{\mathbin}
291 \fdsy@DeclareSymbol{\smallblacktriangleright}{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{\medtriangleright}{symbols}{\mathbin}
299   \fdsy@DeclareAlias{\triangleright}{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{\medblacktriangleright}{symbols}{\mathbin}
307   \fdsy@DeclareAlias{\blacktriangleright}{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}

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318 \fdsy@DeclareAlias{\bullet}{symbols}{\mathbin}
319 \fdsy@DeclareAlias{\smbblkcircle}{symbols}{\mathbin}
320 \fdsy@DeclareSymbol{\medcircle}{symbols}{\mathbin}
321 \fdsy@DeclareAlias{\mdlgwhtcircle}{symbols}{\mathbin}
322 \fdsy@DeclareSymbol{\medblackcircle}{symbols}{\mathbin}
323 \fdsy@DeclareAlias{\mdlgbblkcircle}{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{\lgbblkcircle}{symbols}{\mathord}
350 \fdsy@DeclareSymbol{\smallsquare}{symbols}{\mathbin}
351 \fdsy@DeclareAlias{\smwhtsquare}{symbols}{\mathbin}
352 \fdsy@DeclareSymbol{\smallblacksquare}{symbols}{\mathbin}
353 \fdsy@DeclareAlias{\smbblksquare}{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{\mdlgbblksquare}{symbols}{\mathbin}
361 \fdsy@DeclareAlias{\mdbblksquare}{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{\largeesquare}{symbols}{\mathord}
374   \fdsy@DeclareAlias{\lgwhtsquare}{symbols}{\mathord}
375 \fdsy@DeclareSymbol{\largeblacksquare}{symbols}{\mathord}
376   \fdsy@DeclareAlias{\lgbksquare}{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{\mdlgbldiamond}{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{\diamonddiamond}{symbols}{\mathbin}
400 \fdsy@DeclareSymbol{\smalllozenge}{symbols}{\mathord}
401   \fdsy@DeclareAlias{\smwhtlozenge}{symbols}{\mathord}
402 \fdsy@DeclareSymbol{\smallblacklozenge}{symbols}{\mathord}
403   \fdsy@DeclareAlias{\smblklozenge}{symbols}{\mathord}
404 \fdsy@DeclareSymbol{\medlozenge}{symbols}{\mathord}
405   \fdsy@DeclareAlias{\lozenge}{symbols}{\mathord}
406   \fdsy@DeclareAlias{\mdlwgwtlozenge}{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}

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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{\bumpeqq}{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{\asym}{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{\wedgeq}{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}
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537 \fdsy@DeclareSymbol{\leqslant}{relations}{\mathrel}
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539 \fdsy@DeclareSymbol{\leqq}{relations}{\mathrel}
540 \fdsy@DeclareSymbol{\geqq}{relations}{\mathrel}
541 \fdsy@DeclareSymbol{\lessim}{relations}{\mathrel}

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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}
551 \fdsy@DeclareSymbol{\lesseqtrslant}{relations}{\mathrel}
552 \fdsy@DeclareSymbol{\gtreqlesslant}{relations}{\mathrel}
553 \fdsy@DeclareSymbol{\ll}{relations}{\mathrel}
554 \fdsy@DeclareSymbol{\gg}{relations}{\mathrel}
555 \fdsy@DeclareSymbol{\lll}{relations}{\mathrel}
556 \fdsy@DeclareAlias{\lless}{relations}{\mathrel}
557 \fdsy@DeclareSymbol{\ggg}{relations}{\mathrel}
558 \fdsy@DeclareAlias{\gggr}{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{\sqsubsetneq}{relations}{\mathrel}
582 \fdsy@DeclareSymbol{\sqsupseteq}{relations}{\mathrel}
583 \fdsy@DeclareSymbol{\sqsubsetneqq}{relations}{\mathrel}
584 \fdsy@DeclareSymbol{\sqsupseteqq}{relations}{\mathrel}
585 \fdsy@DeclareSymbol{\Sqsubset}{relations}{\mathrel}
586 \fdsy@DeclareSymbol{\Sqsupset}{relations}{\mathrel}

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587 \fdsy@DeclareSymbol{\subset}{relations}{\mathrel}
588 \fdsy@DeclareSymbol{\supset}{relations}{\mathrel}
589 \fdsy@DeclareSymbol{\subsetneq}{relations}{\mathrel}
590 \fdsy@DeclareSymbol{\supseteq}{relations}{\mathrel}
591 \fdsy@DeclareSymbol{\subsetneqq}{relations}{\mathrel}
592 \fdsy@DeclareSymbol{\supseteqq}{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}
597 \fdsy@DeclareSymbol{\preceq}{relations}{\mathrel}
598 \fdsy@DeclareSymbol{\succeq}{relations}{\mathrel}
599 \fdsy@DeclareSymbol{\preccurlyeq}{relations}{\mathrel}
600 \fdsy@DeclareSymbol{\succcurlyeq}{relations}{\mathrel}
601 \fdsy@DeclareSymbol{\preceqq}{relations}{\mathrel}
602 \fdsy@DeclareSymbol{\succeqq}{relations}{\mathrel}
603 \fdsy@DeclareSymbol{\precsim}{relations}{\mathrel}
604 \fdsy@DeclareSymbol{\succsim}{relations}{\mathrel}
605 \fdsy@DeclareSymbol{\precapprox}{relations}{\mathrel}
606 \fdsy@DeclareSymbol{\succapprox}{relations}{\mathrel}
607 \fdsy@DeclareSymbol{\lessdot}{relations}{\mathrel}
608 \fdsy@DeclareSymbol{\gtrdot}{relations}{\mathrel}
609 \fdsy@DeclareSymbol{\leqdot}{relations}{\mathrel}
610 \fdsy@DeclareSymbol{\geqdot}{relations}{\mathrel}
611 \fdsy@DeclareSymbol{\leqslantdot}{relations}{\mathrel}
612 \fdsy@DeclareAlias{\lesdot}{relations}{\mathrel}
613 \fdsy@DeclareSymbol{\geqslantdot}{relations}{\mathrel}
614 \fdsy@DeclareAlias{\gesdot}{relations}{\mathrel}
615 \fdsy@DeclareSymbol{\eqslantless}{relations}{\mathrel}
616 \fdsy@DeclareSymbol{\eqslantgtr}{relations}{\mathrel}
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{\nbumppeqq}{relations}{\mathrel}
637 \fdsy@DeclareSymbol{\nBumpeq}{relations}{\mathrel}
638 \fdsy@DeclareSymbol{\ndoteq}{relations}{\mathrel}
639 \fdsy@DeclareSymbol{\neqdot}{relations}{\mathrel}
640 \fdsy@DeclareSymbol{\nDoteq}{relations}{\mathrel}
641 \fdsy@DeclareSymbol{\nfallingdotseq}{relations}{\mathrel}
642 \fdsy@DeclareSymbol{\nrisingdotseq}{relations}{\mathrel}
643 \fdsy@DeclareSymbol{\nsmile}{relations}{\mathrel}
644 \fdsy@DeclareSymbol{\nfrown}{relations}{\mathrel}
645 \fdsy@DeclareSymbol{\nsmilefrown}{relations}{\mathrel}
646 \fdsy@DeclareAlias{\nasym}{relations}{\mathrel}
647 \fdsy@DeclareSymbol{\nfrownsmile}{relations}{\mathrel}
648 \fdsy@DeclareAlias{\nclosure}{relations}{\mathrel}
649 \fdsy@DeclareSymbol{\nsmileeq}{relations}{\mathrel}
650 \fdsy@DeclareSymbol{\nfrowneq}{relations}{\mathrel}
651 \fdsy@DeclareAlias{\narceq}{relations}{\mathrel}
652 \fdsy@DeclareSymbol{\neqcirc}{relations}{\mathrel}
653 \fdsy@DeclareSymbol{\ncirceq}{relations}{\mathrel}
654 \fdsy@DeclareSymbol{\nwedgeq}{relations}{\mathrel}
655 \fdsy@DeclareAlias{\nhateq}{relations}{\mathrel}
656 \fdsy@DeclareSymbol{\nveeeq}{relations}{\mathrel}
657 \fdsy@DeclareSymbol{\nstareq}{relations}{\mathrel}
658 \fdsy@DeclareSymbol{\ntriangleeq}{relations}{\mathrel}
659 \fdsy@DeclareSymbol{\nin}{relations}{\mathrel}
660 \fdsy@DeclareAlias{\notin}{relations}{\mathrel}
661 \fdsy@DeclareSymbol{\nowns}{relations}{\mathrel}
662 \fdsy@DeclareAlias{\nni}{relations}{\mathrel}
663 \fdsy@DeclareSymbol{\nless}{relations}{\mathrel}
664 \fdsy@DeclareSymbol{\ngtr}{relations}{\mathrel}
665 \fdsy@DeclareSymbol{\nleq}{relations}{\mathrel}
666 \fdsy@DeclareSymbol{\ngeq}{relations}{\mathrel}
667 \fdsy@DeclareSymbol{\nleqslant}{relations}{\mathrel}
668 \fdsy@DeclareSymbol{\ngeqslant}{relations}{\mathrel}
669 \fdsy@DeclareSymbol{\nleqq}{relations}{\mathrel}
670 \fdsy@DeclareSymbol{\ngeqq}{relations}{\mathrel}
671 \fdsy@DeclareSymbol{\nlesssim}{relations}{\mathrel}
672 \fdsy@DeclareSymbol{\ngtrsim}{relations}{\mathrel}
673 \fdsy@DeclareSymbol{\nlessapprox}{relations}{\mathrel}
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{\ngtreqless}{relations}{\mathrel}
679 \fdsy@DeclareSymbol{\nlesseqgtr}{relations}{\mathrel}
680 \fdsy@DeclareSymbol{\ngtreqless}{relations}{\mathrel}
681 \fdsy@DeclareSymbol{\nlesseqgtrslant}{relations}{\mathrel}
682 \fdsy@DeclareSymbol{\ngtreqlesslant}{relations}{\mathrel}
683 \fdsy@DeclareSymbol{\nll}{relations}{\mathrel}
684 \fdsy@DeclareSymbol{\ngg}{relations}{\mathrel}
685 \fdsy@DeclareSymbol{\nlll}{relations}{\mathrel}
686 \fdsy@DeclareSymbol{\nggg}{relations}{\mathrel}
687 \fdsy@DeclareSymbol{\nlessclosed}{relations}{\mathrel}
688 \fdsy@DeclareAlias{\ntriangleleft}{relations}{\mathrel}
689 \fdsy@DeclareSymbol{\ngtrclosed}{relations}{\mathrel}
690 \fdsy@DeclareAlias{\ntriangleright}{relations}{\mathrel}
691 \fdsy@DeclareSymbol{\nleqclosed}{relations}{\mathrel}
692 \fdsy@DeclareAlias{\ntrianglelefteq}{relations}{\mathrel}
693 \fdsy@DeclareSymbol{\ngeqclosed}{relations}{\mathrel}
694 \fdsy@DeclareAlias{\ntrianglerighteq}{relations}{\mathrel}
695 \fdsy@DeclareSymbol{\nlesscc}{relations}{\mathrel}
696 \fdsy@DeclareAlias{\nltcc}{relations}{\mathrel}
697 \fdsy@DeclareSymbol{\ngtrcc}{relations}{\mathrel}
698 \fdsy@DeclareAlias{\ngtcc}{relations}{\mathrel}
699 \fdsy@DeclareSymbol{\nleqlcc}{relations}{\mathrel}
700 \fdsy@DeclareAlias{\nlescc}{relations}{\mathrel}
701 \fdsy@DeclareSymbol{\ngeqlcc}{relations}{\mathrel}
702 \fdsy@DeclareAlias{\ngescc}{relations}{\mathrel}
703 \fdsy@DeclareSymbol{\nsqsubset}{relations}{\mathrel}
704 \fdsy@DeclareSymbol{\nsqsupset}{relations}{\mathrel}
705 \fdsy@DeclareSymbol{\nsqsubseteq}{relations}{\mathrel}
706 \fdsy@DeclareSymbol{\nsqsupseteq}{relations}{\mathrel}
707 \fdsy@DeclareSymbol{\nsqsubseteqq}{relations}{\mathrel}
708 \fdsy@DeclareSymbol{\nsqsupseteqq}{relations}{\mathrel}
709 \fdsy@DeclareSymbol{\nSqsubset}{relations}{\mathrel}
710 \fdsy@DeclareSymbol{\nSqsupset}{relations}{\mathrel}
711 \fdsy@DeclareSymbol{\nsubset}{relations}{\mathrel}
712 \fdsy@DeclareSymbol{\nsupset}{relations}{\mathrel}
713 \fdsy@DeclareSymbol{\nsubseteq}{relations}{\mathrel}
714 \fdsy@DeclareSymbol{\nsupseteq}{relations}{\mathrel}
715 \fdsy@DeclareSymbol{\nsubseteqq}{relations}{\mathrel}
716 \fdsy@DeclareSymbol{\nsupseteqq}{relations}{\mathrel}
717 \fdsy@DeclareSymbol{\nSubset}{relations}{\mathrel}
718 \fdsy@DeclareSymbol{\nSupset}{relations}{\mathrel}
719 \fdsy@DeclareSymbol{\nprec}{relations}{\mathrel}
720 \fdsy@DeclareSymbol{\nsucc}{relations}{\mathrel}
721 \fdsy@DeclareSymbol{\npreceq}{relations}{\mathrel}

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722 \fdsy@DeclareSymbol{\nsucceq}{relations}{\mathrel}
723 \fdsy@DeclareSymbol{\npreccurlyeq}{relations}{\mathrel}
724 \fdsy@DeclareSymbol{\nsucccurlyeq}{relations}{\mathrel}
725 \fdsy@DeclareSymbol{\npreceqq}{relations}{\mathrel}
726 \fdsy@DeclareSymbol{\nsucceqq}{relations}{\mathrel}
727 \fdsy@DeclareSymbol{\nprecsim}{relations}{\mathrel}
728 \fdsy@DeclareSymbol{\nsuccsim}{relations}{\mathrel}
729 \fdsy@DeclareSymbol{\nprecapprox}{relations}{\mathrel}
730 \fdsy@DeclareSymbol{\nsuccapprox}{relations}{\mathrel}
731 \fdsy@DeclareSymbol{\nlessdot}{relations}{\mathrel}
732 \fdsy@DeclareSymbol{\ngtrdot}{relations}{\mathrel}
733 \fdsy@DeclareSymbol{\nleqdot}{relations}{\mathrel}
734 \fdsy@DeclareSymbol{\ngeqdot}{relations}{\mathrel}
735 \fdsy@DeclareSymbol{\nleqslantdot}{relations}{\mathrel}
736 \fdsy@DeclareAlias{\nlesdot}{relations}{\mathrel}
737 \fdsy@DeclareSymbol{\ngeqslantdot}{relations}{\mathrel}
738 \fdsy@DeclareAlias{\ngesdot}{relations}{\mathrel}
739 \fdsy@DeclareSymbol{\neqlantless}{relations}{\mathrel}
740 \fdsy@DeclareSymbol{\neqlantgr}{relations}{\mathrel}
741 \fdsy@DeclareSymbol{\ncurlyeqprec}{relations}{\mathrel}
742 \fdsy@DeclareSymbol{\ncurlyeqsucc}{relations}{\mathrel}
743 \fdsy@DeclareSymbol{\simneqq}{relations}{\mathrel}
744 \fdsy@DeclareSymbol{\backsimneqq}{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{\succnsm}{relations}{\mathrel}
775 \fdsy@DeclareSymbol{\precnapprox}{relations}{\mathrel}
776 \fdsy@DeclareSymbol{\succnapprox}{relations}{\mathrel}
777
778 \DeclareRobustCommand{\coloneq}{\mathrel{\vdotdot}\mathrel{\equal}}
779 \let\coloneqq\coloneq

FdSymbolC: arrows
780 \fdsy@setslot{0}
781 \fdsy@DeclareSymbol{\rightarrow}{arrows}{\mathrel}
782   \fdsy@DeclareAlias{\rightarrow}{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{\leftrightarrow}{arrows}{\mathrel}
800 \fdsy@DeclareSymbol{\updownarrow}{arrows}{\mathrel}
801 \fdsy@DeclareSymbol{\neswarrow}{arrows}{\mathrel}
802 \fdsy@DeclareSymbol{\nwsearrow}{arrows}{\mathrel}
803 \fdsy@DeclareSymbol{\leftrightarrow}{arrows}{\mathrel}
804 \fdsy@DeclareSymbol{\updownarrow}{arrows}{\mathrel}
805 \fdsy@DeclareSymbol{\neswarrow}{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{\twoheadnarrow}{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{\rightarrowmapsto}{arrows}{\mathrel}
824 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
825 \fdsy@DeclareSymbol{\upmapsto}{arrows}{\mathrel}
826 \fdsy@DeclareAlias{\mapsup}{arrows}{\mathrel}
827 \fdsy@DeclareSymbol{\leftmapsto}{arrows}{\mathrel}
828 \fdsy@DeclareAlias{\mapsfrom}{arrows}{\mathrel}
829 \fdsy@DeclareSymbol{\downmapsto}{arrows}{\mathrel}
830 \fdsy@DeclareAlias{\mapsdown}{arrows}{\mathrel}
831 \fdsy@DeclareSymbol{\nemapsto}{arrows}{\mathrel}
832 \fdsy@DeclareSymbol{\nwmapsto}{arrows}{\mathrel}
833 \fdsy@DeclareSymbol{\swmapsto}{arrows}{\mathrel}
834 \fdsy@DeclareSymbol{\semapsto}{arrows}{\mathrel}
835 \fdsy@DeclareSymbol{\lhookrightarrow}{arrows}{\mathrel}
836 \fdsy@DeclareAlias{\hookrightarrow}{arrows}{\mathrel}
837 \fdsy@DeclareSymbol{\lhookuparrow}{arrows}{\mathrel}
838 \fdsy@DeclareSymbol{\lhookleftarrow}{arrows}{\mathrel}
839 \fdsy@DeclareSymbol{\lhookdownarrow}{arrows}{\mathrel}
840 \fdsy@DeclareSymbol{\lhooknearrow}{arrows}{\mathrel}
841 \fdsy@DeclareSymbol{\lhooknarrow}{arrows}{\mathrel}
842 \fdsy@DeclareAlias{\hknarrow}{arrows}{\mathrel}
843 \fdsy@DeclareSymbol{\lhookswarrow}{arrows}{\mathrel}
844 \fdsy@DeclareSymbol{\lhooksearrow}{arrows}{\mathrel}
845 \fdsy@DeclareAlias{\hksearrow}{arrows}{\mathrel}
846 \fdsy@DeclareSymbol{\rhookrightarrow}{arrows}{\mathrel}
847 \fdsy@DeclareSymbol{\rhookuparrow}{arrows}{\mathrel}
848 \fdsy@DeclareSymbol{\rhookleftarrow}{arrows}{\mathrel}
849 \fdsy@DeclareAlias{\hookleftarrow}{arrows}{\mathrel}
850 \fdsy@DeclareSymbol{\rhookdownarrow}{arrows}{\mathrel}
851 \fdsy@DeclareSymbol{\rhooknearrow}{arrows}{\mathrel}
852 \fdsy@DeclareAlias{\hknearrow}{arrows}{\mathrel}
853 \fdsy@DeclareSymbol{\rhooknarrow}{arrows}{\mathrel}
854 \fdsy@DeclareSymbol{\rhookswarrow}{arrows}{\mathrel}
855 \fdsy@DeclareAlias{\hkswarrow}{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{\leftrightharpoonupdown}{arrows}{\mathrel}
879 \fdsy@DeclareSymbol{\updownharpoonrightleft}{arrows}{\mathrel}
880 \fdsy@DeclareSymbol{\neswharpoonew}{arrows}{\mathrel}
881 \fdsy@DeclareSymbol{\nwseharpoonswe}{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{\cirmid}{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{\nearnarrows}{arrows}{\mathrel}
925 \fdsy@DeclareSymbol{\nwtnarrows}{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{\leftrightarrows}{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{\rightrcurvearrow}{arrows}{\mathrel}
963 \fdsy@DeclareAlias{\acwunderarcarrow}{arrows}{\mathrel}
964 \fdsy@DeclareSymbol{\uprcurvearrow}{arrows}{\mathrel}
965 \fdsy@DeclareSymbol{\leftrccurvearrow}{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{\acwcirclearrowup}{arrows}{\mathrel}
988 \fdsy@DeclareSymbol{\acwcirclearrowleft}{arrows}{\mathrel}
989 \fdsy@DeclareAlias{\circlearrowleft}{arrows}{\mathrel}
990 \fdsy@DeclareAlias{\acwopencirclearrow}{arrows}{\mathrel}

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991 \fdsy@DeclareSymbol{\acwcirclearrowdown}{arrows}{\mathrel}
992   \fdsy@DeclareAlias{\acwgapcirclearrow}{arrows}{\mathrel}
993 \fdsy@DeclareSymbol{\acwcirclearrowright}{arrows}{\mathrel}
994 \fdsy@DeclareSymbol{\cwcirclearrowdown}{arrows}{\mathrel}
995   \fdsy@DeclareAlias{\cwgapcirclearrow}{arrows}{\mathrel}
996 \fdsy@DeclareSymbol{\cwcirclearrowright}{arrows}{\mathrel}
997   \fdsy@DeclareAlias{\circlearrowright}{arrows}{\mathrel}
998   \fdsy@DeclareAlias{\cwopencirclearrow}{arrows}{\mathrel}
999 \fdsy@DeclareSymbol{\cwcirclearrowup}{arrows}{\mathrel}
1000 \fdsy@DeclareSymbol{\cwcirclearrowleft}{arrows}{\mathrel}
1001 \fdsy@DeclareSymbol{\Rrightarrow}{arrows}{\mathrel}
1002 \fdsy@DeclareSymbol{\Uuparrow}{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}

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FdSymbolD: stroked arrows

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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{\ngots}{narrows}{\mathrel}
1067 \fdsy@DeclareSymbol{\ndownarrow}{narrows}{\mathrel}
1068 \fdsy@DeclareSymbol{\nnearrow}{narrows}{\mathrel}
1069 \fdsy@DeclareSymbol{\nnwarrow}{narrows}{\mathrel}
1070 \fdsy@DeclareSymbol{\nswwarrow}{narrows}{\mathrel}
1071 \fdsy@DeclareSymbol{\nsearrow}{narrows}{\mathrel}
1072 \fdsy@DeclareSymbol{\nRrightarrow}{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{\nleftrightarrow}{narrows}{\mathrel}
1081 \fdsy@DeclareSymbol{\nupdownarrow}{narrows}{\mathrel}
1082 \fdsy@DeclareSymbol{\nneswarrow}{narrows}{\mathrel}
1083 \fdsy@DeclareSymbol{\nnwsearrow}{narrows}{\mathrel}
1084 \fdsy@DeclareSymbol{\nLeftrightarrow}{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{\ntwoheadnarrow}{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{\nnarrowtail}{narrows}{\mathrel}
1102 \fdsy@DeclareSymbol{\nswarrowtail}{narrows}{\mathrel}
1103 \fdsy@DeclareSymbol{\nsearrowtail}{narrows}{\mathrel}
1104 \fdsy@DeclareSymbol{\nrightmapsto}{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{\nlhooknarrow}{narrows}{\mathrel}
1123 \fdsy@DeclareAlias{\nhknarrow}{narrows}{\mathrel}
1124 \fdsy@DeclareSymbol{\nlhookswarrow}{narrows}{\mathrel}

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

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

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1215 \fdsy@DeclareSymbol{\nswnearrows}{narrow}{\mathrel}
1216 \fdsy@DeclareSymbol{\nsenwarrows}{narrow}{\mathrel}
1217 \fdsy@DeclareSymbol{\nrightlsquigarrow}{narrow}{\mathrel}
1218 \fdsy@DeclareAlias{\nleadsto}{narrow}{\mathrel}
1219 \fdsy@DeclareAlias{\nrightsquigarrow}{narrow}{\mathrel}
1220 \fdsy@DeclareSymbol{\nuplsquigarrow}{narrow}{\mathrel}
1221 \fdsy@DeclareSymbol{\nleftlsquigarrow}{narrow}{\mathrel}
1222 \fdsy@DeclareSymbol{\ndownlsquigarrow}{narrow}{\mathrel}
1223 \fdsy@DeclareSymbol{\nrightrsquigarrow}{narrow}{\mathrel}
1224 \fdsy@DeclareSymbol{\nuprsquigarrow}{narrow}{\mathrel}
1225 \fdsy@DeclareSymbol{\nlefrsquigarrow}{narrow}{\mathrel}
1226 \fdsy@DeclareAlias{\nleftsquigarrow}{narrow}{\mathrel}
1227 \fdsy@DeclareSymbol{\ndownrsquigarrow}{narrow}{\mathrel}
1228 \fdsy@DeclareSymbol{\nleftrightsquigarrow}{narrow}{\mathrel}
1229 \fdsy@DeclareSymbol{\nupdownsquigarrow}{narrow}{\mathrel}
1230 \fdsy@DeclareSymbol{\nrightleftsquigarrow}{narrow}{\mathrel}
1231 \fdsy@DeclareSymbol{\ndownupsquigarrow}{narrow}{\mathrel}
1232 \fdsy@DeclareSymbol{\nrightlcurvearrow}{narrow}{\mathrel}
1233 \fdsy@DeclareAlias{\ncurvearrowright}{narrow}{\mathrel}
1234 \fdsy@DeclareSymbol{\nuplcurvearrow}{narrow}{\mathrel}
1235 \fdsy@DeclareSymbol{\nleftlcurvearrow}{narrow}{\mathrel}
1236 \fdsy@DeclareSymbol{\ndownlcurvearrow}{narrow}{\mathrel}
1237 \fdsy@DeclareAlias{\ncwrightarcarrow}{narrow}{\mathrel}
1238 \fdsy@DeclareSymbol{\nnelcurvearrow}{narrow}{\mathrel}
1239 \fdsy@DeclareSymbol{\nnwlcurvearrow}{narrow}{\mathrel}
1240 \fdsy@DeclareSymbol{\nswlcurvearrow}{narrow}{\mathrel}
1241 \fdsy@DeclareAlias{\ncwundercurvearrow}{narrow}{\mathrel}
1242 \fdsy@DeclareSymbol{\nselcurvearrow}{narrow}{\mathrel}
1243 \fdsy@DeclareSymbol{\nrightrcurvearrow}{narrow}{\mathrel}
1244 \fdsy@DeclareAlias{\nacwunderarcarrow}{narrow}{\mathrel}
1245 \fdsy@DeclareSymbol{\nuprcurvearrow}{narrow}{\mathrel}
1246 \fdsy@DeclareSymbol{\nleftrcurearrow}{narrow}{\mathrel}
1247 \fdsy@DeclareAlias{\ncurvearrowleft}{narrow}{\mathrel}
1248 \fdsy@DeclareAlias{\nacwoverarcarrow}{narrow}{\mathrel}
1249 \fdsy@DeclareSymbol{\ndownrcurvearrow}{narrow}{\mathrel}
1250 \fdsy@DeclareAlias{\nacwleftarcarrow}{narrow}{\mathrel}
1251 \fdsy@DeclareSymbol{\nnnercurvearrow}{narrow}{\mathrel}
1252 \fdsy@DeclareSymbol{\nnwrcurvearrow}{narrow}{\mathrel}
1253 \fdsy@DeclareSymbol{\nswrcurvearrow}{narrow}{\mathrel}
1254 \fdsy@DeclareSymbol{\nsercurvearrow}{narrow}{\mathrel}
1255 \fdsy@DeclareAlias{\nccwundercurvearrow}{narrow}{\mathrel}
1256 \fdsy@DeclareSymbol{\nleftrightcurvearrow}{narrow}{\mathrel}
1257 \fdsy@DeclareSymbol{\nupdowncurvearrow}{narrow}{\mathrel}
1258 \fdsy@DeclareSymbol{\nrightleftcurvearrow}{narrow}{\mathrel}
1259 \fdsy@DeclareSymbol{\ndownupcurvearrow}{narrow}{\mathrel}

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1260 \fdsy@DeclareSymbol{\nneswcurvearrow}{narrow}{\mathrel}
1261 \fdsy@DeclareSymbol{\nnnwsecurvearrow}{narrow}{\mathrel}
1262 \fdsy@DeclareSymbol{\nswnecurvearrow}{narrow}{\mathrel}
1263 \fdsy@DeclareSymbol{\nsenwcurvearrow}{narrow}{\mathrel}
1264 \fdsy@DeclareSymbol{\nleftfootline}{narrow}{\mathrel}
1265 \fdsy@DeclareAlias{\nvlongdash}{narrow}{\mathrel}
1266 \fdsy@DeclareSymbol{\nrightfootline}{narrow}{\mathrel}
1267 \fdsy@DeclareAlias{\nlongdashv}{narrow}{\mathrel}
1268 \fdsy@DeclareSymbol{\nacwcirclearrowup}{narrow}{\mathrel}
1269 \fdsy@DeclareSymbol{\nacwcirclearrowleft}{narrow}{\mathrel}
1270 \fdsy@DeclareAlias{\ncirclearrowleft}{narrow}{\mathrel}
1271 \fdsy@DeclareAlias{\nacwopencirclearrow}{narrow}{\mathrel}
1272 \fdsy@DeclareSymbol{\nacwcirclearrowdown}{narrow}{\mathrel}
1273 \fdsy@DeclareAlias{\nacwgapcirclearrow}{narrow}{\mathrel}
1274 \fdsy@DeclareSymbol{\nacwcirclearrowright}{narrow}{\mathrel}
1275 \fdsy@DeclareSymbol{\ncwcirclearrowdown}{narrow}{\mathrel}
1276 \fdsy@DeclareAlias{\ncwgapcirclearrow}{narrow}{\mathrel}
1277 \fdsy@DeclareSymbol{\ncwcirclearrowright}{narrow}{\mathrel}
1278 \fdsy@DeclareAlias{\ncirclearrowright}{narrow}{\mathrel}
1279 \fdsy@DeclareAlias{\ncwopencirclearrow}{narrow}{\mathrel}
1280 \fdsy@DeclareSymbol{\ncwcirclearrowup}{narrow}{\mathrel}
1281 \fdsy@DeclareSymbol{\ncwcirclearrowleft}{narrow}{\mathrel}
1282 \fdsy@DeclareSymbol{\nRrightarrow}{narrow}{\mathrel}
1283 \fdsy@DeclareSymbol{\nUuparrow}{narrow}{\mathrel}
1284 \fdsy@DeclareSymbol{\nLleftarrow}{narrow}{\mathrel}
1285 \fdsy@DeclareSymbol{\nDdownarrow}{narrow}{\mathrel}
1286 \fdsy@setslot{224}
1287 \fdsy@DeclareSymbol{\nrightvDash}{narrow}{\mathrel}
1288 \fdsy@DeclareAlias{\nvDash}{narrow}{\mathrel}
1289 \fdsy@DeclareAlias{\nassert}{narrow}{\mathrel}
1290 \fdsy@DeclareSymbol{\nupvDash}{narrow}{\mathrel}
1291 \fdsy@DeclareAlias{\nperp}{narrow}{\mathrel}
1292 \fdsy@DeclareSymbol{\nleftvDash}{narrow}{\mathrel}
1293 \fdsy@DeclareAlias{\ndashv}{narrow}{\mathrel}
1294 \fdsy@DeclareSymbol{\ndownvDash}{narrow}{\mathrel}
1295 \fdsy@DeclareSymbol{\nrightvDash}{narrow}{\mathrel}
1296 \fdsy@DeclareAlias{\nvDash}{narrow}{\mathrel}
1297 \fdsy@DeclareAlias{\nmodels}{narrow}{\mathrel}
1298 \fdsy@DeclareSymbol{\nupvDash}{narrow}{\mathrel}
1299 \fdsy@DeclareAlias{\nVbar}{narrow}{\mathrel}
1300 \fdsy@DeclareSymbol{\nleftvDash}{narrow}{\mathrel}
1301 \fdsy@DeclareAlias{\nDashv}{narrow}{\mathrel}
1302 \fdsy@DeclareSymbol{\ndownvDash}{narrow}{\mathrel}
1303 \fdsy@DeclareAlias{\nbarV}{narrow}{\mathrel}
1304 \fdsy@DeclareSymbol{\nrightVdash}{narrow}{\mathrel}

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

FdSymbolE: large operators
1316 \fdsy@setslot{0}
1317 \fdsy@DeclareSymbol{\tbigplus}{largesymbols}{\mathop}
1318 \fdsy@DeclareSymbol{\dbigplus}{largesymbols}{\mathop}
1319 \fdsy@DeclareSymbol{\tbigrtimes}{largesymbols}{\mathop}
1320 \fdsy@DeclareSymbol{\dbigrtimes}{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{\dbiguplus}{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{\tbigoast}{largesymbols}{\mathop}
1382 \fdsy@DeclareSymbol{\dbigoast}{largesymbols}{\mathop}
1383 \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
1384 \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
1385 \fdsy@DeclareSymbol{\tcoprod}{largesymbols}{\mathop}
1386 \fdsy@DeclareSymbol{\dcoprod}{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{\diiiiint}{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{\doiiint}{largesymbols}{\mathop}
1425 \fdsy@DeclareSymbol{\trcanglerightint}{largesymbols}{\mathop}
1426 \fdsy@DeclareAlias{\tointctr-clockwise}{largesymbols}{\mathop}
1427 \fdsy@DeclareSymbol{\drcanglerightint}{largesymbols}{\mathop}
1428 \fdsy@DeclareAlias{\dointctr-clockwise}{largesymbols}{\mathop}
1429 \fdsy@DeclareSymbol{\tlccanglerightint}{largesymbols}{\mathop}
1430 \fdsy@DeclareAlias{\tvarointclockwise}{largesymbols}{\mathop}
1431 \fdsy@DeclareSymbol{\dlccanglerightint}{largesymbols}{\mathop}
1432 \fdsy@DeclareAlias{\dvarointclockwise}{largesymbols}{\mathop}
1433 \fdsy@DeclareSymbol{\trccircleleftint}{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{\tlccircleleftint}{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{\bigoast}{\dbigoast}{\tbigoast}
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}

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1484 \fdsy@DeclareIntegral{\iiint}{\diiint}{\tiiint}
1485 \fdsy@DeclareIntegral{\iiiint}{\diiint}{\tiiint}
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{\oint}{\dooint}{\tooint}
1498 \fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
1499 \fdsy@DeclareIntegral{\rcirclearightint}{\drcirclearightint}{\trcirclearightint}
1500 \fdsy@DeclareIntegral{\ointctrcclockwise}{\dointctrcclockwise}{\tointctrcclockwise}
1501 \fdsy@DeclareIntegral{\lcirclearightint}{\dlcirclearightint}{\tlcirclearightint}
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     {{\mkern0.5mu\cdotp\mkern0.5mu}\mkern0.5mu\cdotp\mkern0.5mu}{\cdotp\mkern0.5mu}{\mkern0.5mu\cdotp\mkern0.5mu}}%
1513     {{\mkern0.5mu\cdotp\mkern0.5mu}\mkern0.5mu\cdotp\mkern0.5mu}{\cdotp\mkern0.5mu}{\mkern0.5mu\cdotp\mkern0.5mu}}%
1514     {{\mkern0.5mu\cdotp\mkern0.5mu}\mkern0.5mu\cdotp\mkern0.5mu}{\cdotp\mkern0.5mu}{\mkern0.5mu\cdotp\mkern0.5mu}}%
1515   \mkern-6mu}
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

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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{\ullcorner}{delimiters}{"4F}
1547   \fdsy@DeclareClose{\ulrcorner}{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}

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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}{"C1}
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{\ulrcorner}{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{\brace}{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{\angledot}{delimiters}{"9D}
1615 \fdsy@DeclareClose{\rangledot}{delimiters}{"A3}
1616 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}{"A9}

```

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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\mid
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{\lgroup}{delimiters}{"7E}
1648 \fdsy@DeclareOpen{\rgroup}{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}

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

    Horizontal braces.

1664 \DeclareMathSymbol{\braceleft}{\mathord}{delimiters}{"CC}
1665 \DeclareMathSymbol{\bracel}{\mathord}{delimiters}{"CD}
1666 \DeclareMathSymbol{\bracerd}{\mathord}{delimiters}{"CE}
1667 \DeclareMathSymbol{\bracer}{\mathord}{delimiters}{"CF}
1668 \DeclareMathSymbol{\bracem}{\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@\braceleft\bracem\bracerd\bracemid}
1674 \def\upbracefill@{\bracefill@\bracel\bracemu\bracer\bracemid}
1675 \def\downgroupfill@{\bracefill@\braceleft{}\bracerd\bracemid}
1676 \def\upgroupfill@{\bracefill@\bracel{}\bracer\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}}}\limi
1682 \ DeclareRobustCommand{\underbrace}[1]{\mathop{\mathpalette{\underarrow@\upbracefill@}{#1}}}\limi
1683 \ DeclareRobustCommand{\overgroup}{\mathop{\overarrow@\downgroupfill@}}
1684 \ DeclareRobustCommand{\undergroup}{\mathop{\underarrow@\upgroupfill@}}
1685 \ DeclareRobustCommand{\overlinesegment}{\mathop{\overarrow@\linesegmentfill@}}
1686 \ DeclareRobustCommand{\overleftharpoon}{\mathop{\overarrow@\leftharpoonfill@}}
1687 \ DeclareRobustCommand{\overrightharpoon}{\mathop{\overarrow@\rightharpoonfill@}}
1688 \ DeclareRobustCommand{\underlinesegment}{\mathop{\underarrow@\linesegmentfill@}}

    Radical symbols.

1689 \iffdsy@large delims
1690 \ DeclareMathRadical{\sqrt sign}{delimiters}{"D4}{delimiters}{"D4}
1691 \ DeclareMathSymbol{\surd}{\mathop}{delimiters}{"D4}
1692 \else
1693 \ DeclareMathRadical{\sqrt sign}{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@large delims
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\ooalign{$\hfil#1/\hfil$\crcr$#1#2$}}
1722 \def \not#1{\mathrel{\m@th\mathpalette\c@ncel{#1}}}
1723 
```