

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}
```

¹<http://www.typotheque.com/fonts>

Key	Values
<code>normalweight</code>	Book*, Demi, auto
<code>boldweight</code>	Medium*, Bold, auto
<code>scale</code>	$\langle factor \rangle$
<code>largedelims</code>	true, false*
<code>opstyle</code>	serif*, sans

Table 1: Summary of options

to the preamble of your document. This redefines most of the standard mathematical symbols and makes available many new ones (see Section 5). For the available options see Section 3.

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 Options

All package options are set using a $\langle key \rangle = \langle value \rangle$ syntax. Boolean options accept `true` and `false` as values, and setting a Boolean key without a value is equivalent to setting it to `true`. Table 1 lists all option keys of the `fdsymbol` package with their possible values; values that are marked with an asterisk correspond to the default behaviour of the package.

4 Font selection

4.1 Weights

FdSymbol comes in four weights, which are (in increasing order) Book, Demi, Medium and Bold. Of these, Book and Demi 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

²<http://www.ctan.org/pkg/mnsymbol/>

used. For example, to use the Medium weight as the normal weight in math, add `normalweight=Medium` to the package options. Analogously, to use the Bold weight with `\boldmath` or `\boldsymbol`, add `boldweight=Bold` to the package options. By default, Book and Medium are used. Additionally, it is possible to use a suitable weight automatically depending on the font size by selecting `auto`. For example, if you use the option `normalweight=auto`, the Book weight will be used for normal and large sizes, but the Demi weight will be used for small sizes (e.g. in sub- and superscripts).

4.2 Size

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.

4.3 Stylistic variants

In order to use `FdSymbol` with sans-serif text fonts, there are sans-serif variants of glyphs that contain a product or summation sign. These can be accessed by the commands `\varprod`, `\varcoprod`, `\varsum`, etc. To access these glyphs using the standard commands `\prod`, `\coprod`, `\sum`, etc., use the option `opstyle=sans`. If this option is active, the serif variants of these glyphs can be accessed by the `\var...` commands instead.

5 Symbols

The `fdsymbol` package provides the following symbols.

5.1 Ordinary symbols

<code>\hdots</code>	<code>\squaredots</code>
<code>\vdots</code>	<code>\neg</code> , <code>\lnot</code>
<code>\udots</code> , <code>\adots</code>	<code>\backneg</code> , <code>\invnot</code> , <code>\invneg</code>
<code>\ddots</code>	<code>\turnedneg</code> , <code>\turnednot</code>
<code>\righttherefore</code>	<code>\turnedbackneg</code>
<code>\uptherefore</code> , <code>\therefore</code>	\triangle <code>\largetriangleup</code>
<code>\lefttherefore</code>	∇ <code>\largetriangledown</code>
<code>\downtherefore</code> , <code>\because</code>	\emptyset <code>\emptyset</code> , <code>\diameter</code> ,

\varnothing	<code>\varnothing</code>	\sphericalangle	<code>\measuredrightangledot,</code> <code>\rightanglemdot</code>
\emptyset	<code>\revemptyset</code>	\prime	<code>\prime</code>
\bigcirc	<code>\largecircle, \lgwhtcircle</code>	\backprime	<code>\backprime</code>
\bullet	<code>\largeblackcircle</code>	\checkmark	<code>\checkmark</code>
\square	<code>\largesquare, \lgwhtsquare</code>	\lightning	<code>\lightning, \downzigzagarrow</code>
\blacksquare	<code>\largeblacksquare,</code> <code>\lgbklsquare</code>	\diamond	<code>\diamondsuit</code>
\lozenge	<code>\smalllozenge, \smwhtlozenge</code>	\blacklozenge	<code>\vardiamondsuit</code>
\blacklozenge	<code>\smallblacklozenge,</code> <code>\smbklozenge</code>	\heartsuit	<code>\heartsuit</code>
\medlozenge	<code>\medlozenge, \lozenge,</code> <code>\mdlwhtlozenge,</code> <code>\mdwhtlozenge</code>	\varheartsuit	<code>\varheartsuit</code>
\blacklozenge	<code>\medblacklozenge,</code> <code>\blacklozenge,</code> <code>\mdlgbklozenge,</code> <code>\mdbklozenge</code>	\spadesuit	<code>\spadesuit</code>
\lozengeminus	<code>\lozengeminus</code>	\clubsuit	<code>\clubsuit</code>
\star	<code>\largewhitestar</code>	\maltese	<code>\maltese</code>
\bigstar	<code>\largeblackstar, \bigstar</code>	\starofdavid	<code>\starofdavid</code>
∞	<code>\infty</code>	\sector	<code>\sector</code>
\angle	<code>\angle</code>	\forall	<code>\forall</code>
\revangle	<code>\revangle</code>	\exists	<code>\exists</code>
\measuredangle	<code>\measuredangle</code>	\nexists	<code>\nexists</code>
\revmeasuredangle	<code>\revmeasuredangle,</code> <code>\measuredangleleft</code>	\Finv	<code>\Finv</code>
\sphericalangle	<code>\sphericalangle</code>	\Game	<code>\Game</code>
\sphericalangleup	<code>\sphericalangleup</code>	\complement	<code>\complement</code>
\sphericalangleleft	<code>\sphericalangleleft,</code> <code>\revsphericalangle, \gtlpar</code>	\flat	<code>\flat</code>
\sphericalangledown	<code>\sphericalangledown</code>	\natural	<code>\natural</code>
\rightangle	<code>\rightangle</code>	\sharp	<code>\sharp</code>
\measuredrightangle	<code>\measuredrightangle</code>	\aleph	<code>\aleph</code>
\rightanglesquare	<code>\rightanglesquare,</code> <code>\rightanglesqr</code>	\beth	<code>\beth</code>
		\gimel	<code>\gimel</code>
		\daleth	<code>\daleth</code>
		\wp	<code>\wp</code>
		\top	<code>\top</code>
		\bot	<code>\bot</code>
		$/$	<code>/, \mathslash</code>
		\backslash	<code>\backslash</code>
		$ $	<code> , \vert</code>
		$\ $	<code>\Vert</code>
		$\ $	<code>\Vvert</code>

5.2 Binary operators

\cdot	<code>\cdot</code>	$-$	<code>-, \minus</code>
\centerdot	<code>\centerdot</code>	\div	<code>\medslash, \smalldivslash</code>
\hdotdot	<code>\hdotdot</code>	\backslash	<code>\medbackslash, \smallsetminus</code>
\vdotdot	<code>\vdotdot</code>	$+$	<code>+, \plus</code>
\udotdot	<code>\udotdot</code>	\times	<code>\times</code>
\ddotdot	<code>\ddotdot</code>	$\dot{-}$	<code>\dotminus</code>

\mp	<code>\minusdot</code>	\sqcup	<code>\sqcup</code>
\div	<code>\div</code>	\sqcap	<code>\sqcap</code>
$\dot{-}$	<code>\minusfdots</code>	$\sqcup\sqcup$	<code>\doublesqcup, \Sqcup</code>
$\dot{-}$	<code>\minusrdots</code>	$\sqcap\sqcap$	<code>\doublesqcap, \Sqcap</code>
\pm	<code>\pm</code>	$\sqcup\dot{}$	<code>\sqcupdot</code>
\mp	<code>\mp</code>	$\sqcap\dot{}$	<code>\sqcapdot</code>
$\dot{+}$	<code>\dotplus</code>	$\sqcup\plus$	<code>\sqcupplus</code>
$\dot{+}$	<code>\plusdot</code>	$\sqcap\plus$	<code>\sqcapplus</code>
$\dot{\times}$	<code>\dottimes</code>	\lrcorner	<code>\pullback</code>
\times	<code>\timesbar</code>	\lrcorner	<code>\pushout</code>
\ast	<code>\divideontimes</code>	\triangleright	<code>\smalltriangleright</code>
\int	<code>\intprod</code>	\triangleup	<code>\smalltriangleup</code>
\int	<code>\intprodr</code>	\triangleleft	<code>\smalltriangleleft</code>
\times	<code>\leftthreetimes</code>	\triangledown	<code>\smalltriangledown</code>
\times	<code>\rightthreetimes</code>	\blacktriangleright	<code>\smallblacktriangleright</code>
\times	<code>\dtimes, \btimes</code>	\blacktriangleup	<code>\smallblacktriangleup</code>
\times	<code>\rtimes</code>	\blacktriangleleft	<code>\smallblacktriangleleft</code>
\times	<code>\utimes, \ttimes</code>	\blacktriangledown	<code>\smallblacktriangledown</code>
\times	<code>\ltimes</code>	\triangleright	<code>\medtriangleright,</code> <code>\triangleright</code>
\times	<code>\lrtimes</code>	\triangle	<code>\medtriangleup, \triangle,</code> <code>\vartriangle</code>
\bowtie	<code>\upbowtie, \hourglass</code>	\triangleleft	<code>\medtriangleleft,</code> <code>\triangleleft</code>
\succ	<code>\rightY</code>	\triangledown	<code>\medtriangledown,</code> <code>\triangledown</code>
\succ	<code>\upY</code>	\blacktriangleright	<code>\medblacktriangleright,</code> <code>\blacktriangleright</code>
\prec	<code>\leftY</code>	\blacktriangleup	<code>\medblacktriangleup,</code> <code>\blacktriangle</code>
\succ	<code>\downY</code>	\blacktriangleleft	<code>\medblacktriangleleft,</code> <code>\blacktriangleleft</code>
\wedge	<code>\wedge, \land</code>	\blacktriangledown	<code>\medblacktriangledown,</code> <code>\blacktriangledown</code>
\vee	<code>\vee, \lor</code>	\triangle	<code>\bigtriangleup</code>
\wedge	<code>\wedgedot</code>	\triangledown	<code>\bigtriangledown</code>
\vee	<code>\veedot</code>	\circ	<code>\smallcircle, \circ,</code> <code>\smwhtcircle</code>
\wedge	<code>\doublewedge, \wedgeonwedge</code>	\bullet	<code>\smallblackcircle, \bullet,</code> <code>\smbkcircle</code>
\vee	<code>\doublevee, \veeonvee</code>	\circ	<code>\medcircle, \mdlgwhtcircle,</code> <code>\mdwhtcircle</code>
\curlywedge	<code>\curlywedge</code>	\bullet	<code>\medblackcircle,</code> <code>\mdlgblkcircle, \mdblkcircle</code>
\curlyvee	<code>\curlyvee</code>	\ominus	<code>\ominus</code>
$\bar{\wedge}$	<code>\barwedge</code>		
$\bar{\vee}$	<code>\veebar</code>		
$\bar{\bar{\wedge}}$	<code>\doublebarwedge</code>		
$\bar{\bar{\vee}}$	<code>\veedoublebar</code>		
\cup	<code>\cup</code>		
\cap	<code>\cap</code>		
$\cup\cup$	<code>\doublecup, \Cup</code>		
$\cap\cap$	<code>\doublecap, \Cap</code>		
$\cup\dot{}$	<code>\cupdot</code>		
$\cap\dot{}$	<code>\capdot</code>		
$\cup\plus$	<code>\cupplus, \uplus</code>		
$\cap\plus$	<code>\capplus</code>		

⊖	<code>\overt, \circledvert</code>	◇	<code>\meddiamond, \Diamond,</code> <code>\mdlgwhtdiamond,</code> <code>\mdwhtdiamond</code>
⊘	<code>\oslash</code>	◆	<code>\medblackdiamond,</code> <code>\mdlgblkdiamond,</code> <code>\mdblkdiamond</code>
⊗	<code>\obackslash, \obslash</code>	◇	<code>\diamondminus</code>
⊕	<code>\oplus</code>	◇	<code>\diamondvert</code>
⊗	<code>\otimes</code>	◇	<code>\diamondslash</code>
⊙	<code>\odot</code>	◇	<code>\diamondbackslash,</code> <code>\diamondbslash</code>
⊙	<code>\ocirc, \circledcirc</code>	◇	<code>\diamondplus</code>
⊗	<code>\oast, \circledast</code>	◇	<code>\diamondtimes</code>
⊖	<code>\odash, \circleddash</code>	◇	<code>\diamondddot, \diamondcdot</code>
⊕	<code>\oequal, \circledequal</code>	◇	<code>\diamondddiamond</code>
○	<code>\bigcirc</code>	☆	<code>\smallwhitestar, \smwhitestar</code>
◻	<code>\smallsquare, \smwhtsquare</code>	★	<code>\smallblackstar, \star</code>
■	<code>\smallblacksquare,</code> <code>\smbksquare</code>	☆	<code>\medwhitestar</code>
◻	<code>\medsquare, \square, \Box,</code> <code>\mdlgwhtsquare, \mdwhtsquare</code>	★	<code>\medblackstar, \medstar</code>
■	<code>\medblacksquare,</code> <code>\mdlgblksquare, \mdblksquare</code>	*	<code>*, \ast</code>
⊖	<code>\boxminus</code>	⌈	<code>\intercal</code>
⊖	<code>\boxvert, \boxbar</code>	⌋	<code>\wreath, \wr</code>
⊗	<code>\boxslash, \boxdiag</code>	⌈	<code>\amalg</code>
⊗	<code>\boxbackslash, \boxbslash</code>	⌋	<code>\varamalg</code>
⊕	<code>\boxplus</code>	◁	<code>\lhd</code>
⊗	<code>\boxtimes</code>	▷	<code>\rhd</code>
◻	<code>\boxdot</code>	◁	<code>\unlhd</code>
◻	<code>\boxbox</code>	▷	<code>\unrhd</code>
◇	<code>\smalldiamond, \diamond,</code> <code>\smwhtdiamond</code>	/	<code>\divslash</code>
◆	<code>\smallblackdiamond,</code> <code>\blackdiamond, \smbldiamond</code>	\	<code>\setminus</code>

5.3 Relations

=	<code>=, \equal, \Relbar</code>	≈	<code>\approxeq</code>
≡	<code>\equiv</code>	⋈	<code>\bumpeq</code>
~	<code>\sim</code>	≐	<code>\bumpeqq</code>
↖	<code>\backsim</code>	⋈	<code>\Bumpeq</code>
≈	<code>\approx</code>	⋈	<code>\doteq</code>
≈	<code>\triplesim, \approxident</code>	⋈	<code>\eqdot</code>
≈	<code>\simeq</code>	⋈	<code>\Doteq</code>
≈	<code>\backsimeq</code>	⋈	<code>\fallingdotseq</code>
≈	<code>\eqsim</code>	⋈	<code>\risingdotseq</code>
≡	<code>\cong</code>	⋈	<code>\coloneq, \coloneqq</code>
≡	<code>\backcong</code>	⋈	<code>\eqcolon, \eqqcolon</code>
≡	<code>\dotcong</code>	⋈	<code>\smile, \smallsmile</code>

\curvearrowright	<code>\frown, \smallfrown</code>	\sqsubset	<code>\sqsubset</code>
\times	<code>\smilefrown, \asymp</code>	\sqsupset	<code>\sqsupset</code>
\circ	<code>\frownsmile, \closure</code>	\sqsubseteq	<code>\sqsubseteq</code>
\equiv	<code>\smileeq</code>	\sqsupseteq	<code>\sqsupseteq</code>
\ni	<code>\frowneq, \arceq</code>	\sqsubseteqeq	<code>\sqsubseteqeq</code>
\equiv	<code>\eqcirc</code>	\sqsupseteqeq	<code>\sqsupseteqeq</code>
\circ	<code>\circeq</code>	\Ssqsubset	<code>\Ssqsubset</code>
\triangleright	<code>\wedgeeq, \hateq</code>	\Ssqsupset	<code>\Ssqsupset</code>
\equiv	<code>\veeeq</code>	\subset	<code>\subset</code>
\star	<code>\stareq</code>	\supset	<code>\supset</code>
\trianglelefteq	<code>\triangleleeq, \triangleleq</code>	\subseteq	<code>\subseteq</code>
\in	<code>\in</code>	\supseteq	<code>\supseteq</code>
\ni	<code>\owns, \ni</code>	\subseteqeq	<code>\subseteqeq</code>
$<$	<code><, \less</code>	\supseteqeq	<code>\supseteqeq</code>
$>$	<code>>, \gtr</code>	\Subset	<code>\Subset</code>
\leq	<code>\leq, \le</code>	\Supset	<code>\Supset</code>
\geq	<code>\geq, \ge</code>	\prec	<code>\prec</code>
\leqslant	<code>\leqslant</code>	\succ	<code>\succ</code>
\geqslant	<code>\geqslant</code>	\preceq	<code>\preceq</code>
\leqq	<code>\leqq</code>	\succeq	<code>\succeq</code>
\geqq	<code>\geqq</code>	\preccurlyeq	<code>\preccurlyeq</code>
\lesssim	<code>\lesssim</code>	\succcurlyeq	<code>\succcurlyeq</code>
\gtrsim	<code>\gtrsim</code>	\preceqq	<code>\preceqq</code>
\lessapprox	<code>\lessapprox</code>	\succeqq	<code>\succeqq</code>
\gtrapprox	<code>\gtrapprox</code>	\precapprox	<code>\precapprox</code>
\lessgtr	<code>\lessgtr</code>	\succapprox	<code>\succapprox</code>
\gtrless	<code>\gtrless</code>	\lessdot	<code>\lessdot</code>
\lesseqgtr	<code>\lesseqgtr</code>	\gtrdot	<code>\gtrdot</code>
\gtreqless	<code>\gtreqless</code>	\leqdot	<code>\leqdot</code>
\lesseqqgtr	<code>\lesseqqgtr</code>	\geqdot	<code>\geqdot</code>
\gtreqqless	<code>\gtreqqless</code>	\leqslantdot, \lesdot	<code>\leqslantdot, \lesdot</code>
\lesseqslantgtr, \lesq	<code>\lesseqslantgtr, \lesq</code>	\geqslantdot, \gesdot	<code>\geqslantdot, \gesdot</code>
\gtreqslantless, \gesl	<code>\gtreqslantless, \gesl</code>	\eqslantless	<code>\eqslantless</code>
\ll	<code>\ll</code>	\eqslantgtr	<code>\eqslantgtr</code>
\gg	<code>\gg</code>	\curlyeqprec	<code>\curlyeqprec</code>
\lll, \lllless	<code>\lll, \lllless</code>	\curlyeqsucc	<code>\curlyeqsucc</code>
\ggg, \gggtr	<code>\ggg, \gggtr</code>	\thicksim	<code>\thicksim</code>
$\lessclosed, \vartriangleleft$	<code>\lessclosed, \vartriangleleft</code>	\thickapprox	<code>\thickapprox</code>
$\gtrclosed, \vartriangleright$	<code>\gtrclosed, \vartriangleright</code>	\rightarrow, \to	<code>\rightarrow, \to</code>
$\leqclosed, \trianglelefteq$	<code>\leqclosed, \trianglelefteq</code>	\uparrow	<code>\uparrow</code>
$\geqclosed, \trianglerighteq$	<code>\geqclosed, \trianglerighteq</code>	\leftarrow, \gets	<code>\leftarrow, \gets</code>
\lesscc, \ltcc	<code>\lesscc, \ltcc</code>	\downarrow	<code>\downarrow</code>
\gtrcc, \gtcc	<code>\gtrcc, \gtcc</code>	\nearrow	<code>\nearrow</code>
\leqslcc, \lescc	<code>\leqslcc, \lescc</code>		
\geqslcc, \gescc	<code>\geqslcc, \gescc</code>		

\nwarrow	<code>\nwarrow</code>	\leftarrow	<code>\varhookleftarrow</code>
\swarrow	<code>\swarrow</code>	\downarrow	<code>\varhookdownarrow</code>
\searrow	<code>\searrow</code>	\nearrow	<code>\varhooknearrow</code>
\Rightarrow	<code>\Rightarrow</code>	\hookrightarrow	<code>\hookrightarrow, \hkrightarrow</code>
\Uparrow	<code>\Uparrow</code>	\swarrow	<code>\varhookswarrow</code>
\Leftarrow	<code>\Leftarrow</code>	\searrow	<code>\hooksearrow, \hksearrow</code>
\Downarrow	<code>\Downarrow</code>	\rightarrow	<code>\varhookrightarrow</code>
\nearrow	<code>\Nearrow</code>	\uparrow	<code>\varhookuparrow</code>
\nwarrow	<code>\Nwarrow</code>	\leftarrow	<code>\hookleftarrow</code>
\swarrow	<code>\Swarrow</code>	\downarrow	<code>\hookdownarrow</code>
\searrow	<code>\Searrow</code>	\nearrow	<code>\hooknearrow, \hknearrow</code>
\leftrightarrow	<code>\leftrightharrow</code>	\nwarrow	<code>\varhooknwarrow</code>
\updownarrow	<code>\updownarrow</code>	\swarrow	<code>\hookswarrow, \hkswarrow</code>
\nearrow	<code>\neswarrow</code>	\searrow	<code>\varhooksearrow</code>
\nwarrow	<code>\nwsearrow</code>	\rightarrow	<code>\rightharpoonup</code>
\Leftrightarrow	<code>\Leftrightarrow</code>	\leftarrow	<code>\upharpoonleft</code>
\updownarrow	<code>\Updownarrow</code>	\leftarrow	<code>\leftharpoondown</code>
\nearrow	<code>\Neswarrow</code>	\downarrow	<code>\downharpoonright</code>
\nwarrow	<code>\Nwsearrow</code>	\nearrow	<code>\neharpoonnw</code>
\twoheadrightarrow	<code>\twoheadrightarrow</code>	\nwarrow	<code>\nwharpoonsw</code>
\twoheaduparrow	<code>\twoheaduparrow</code>	\swarrow	<code>\swharpoone</code>
\twoheadleftarrow	<code>\twoheadleftarrow</code>	\searrow	<code>\seharpoone</code>
\twoheaddownarrow	<code>\twoheaddownarrow</code>	\rightarrow	<code>\rightharpoondown</code>
\twoheadnearrow	<code>\twoheadnearrow</code>	\uparrow	<code>\upharpoonright, \restriction</code>
\twoheadnwarrow	<code>\twoheadnwarrow</code>	\leftarrow	<code>\leftharpoonup</code>
\twoheadswarrow	<code>\twoheadswarrow</code>	\downarrow	<code>\downharpoonleft</code>
\twoheadsearrow	<code>\twoheadsearrow</code>	\nearrow	<code>\neharpoone</code>
\rightarrowtail	<code>\rightarrowtail</code>	\searrow	<code>\nwharpoonne</code>
\uparrowtail	<code>\uparrowtail</code>	\swarrow	<code>\swharpoonnw</code>
\leftarrowtail	<code>\leftarrowtail</code>	\searrow	<code>\seharpoonsw</code>
\downarrowtail	<code>\downarrowtail</code>	\rightarrow	<code>\leftrightharpoonupdown</code>
\nearrowtail	<code>\nearrowtail</code>	\uparrow	<code>\updownharpoonleftright</code>
\nwarrowtail	<code>\nwarrowtail</code>	\nearrow	<code>\neswharpoonnwse</code>
\swarrowtail	<code>\swarrowtail</code>	\nwarrow	<code>\nwseharpoonnesw</code>
\searrowtail	<code>\searrowtail</code>	\leftarrow	<code>\leftrightharpoondownup</code>
\mapsto	<code>\rightmapsto, \mapsto</code>	\downarrow	<code>\updownharpoonrightleft</code>
\upmapsto	<code>\upmapsto, \mapsup</code>	\swarrow	<code>\neswharpoonsenw</code>
\leftmapsto	<code>\leftmapsto, \mapsfrom</code>	\searrow	<code>\nwseharpoonswne</code>
\downmapsto	<code>\downmapsto, \mapsdown</code>	\Rightarrow	<code>\rightleftharpoons</code>
\Rrightarrow	<code>\Rightmapsto, \Mapsto</code>	\updownarrow	<code>\updownharpoons,</code> <code>\updownharpoonsleftright</code>
\Uparrow	<code>\Upmapsto, \Mapsup</code>	\nearrow	<code>\neswharpoons</code>
\Leftarrow	<code>\Leftmapsto, \Mapsfrom</code>	\nwarrow	<code>\senwharpoons</code>
\Downarrow	<code>\Downmapsto, \Mapsdown</code>	\Leftrightarrow	<code>\leftrightharpoons</code>
\rightarrow	<code>\hookrightarrow</code>		
\uparrow	<code>\hookuparrow</code>		

⌋	<code>\downupharpoons,</code>	↷	<code>\rightwavearrow, \leadsto,</code>
	<code>\downupharpoonsleftright</code>		<code>\rightsquigarrow,</code>
↗	<code>\swneharpoons</code>		<code>\rightcurvedarrow</code>
↖	<code>\nwseharpoons</code>	⤴	<code>\varupwavearrow</code>
→	<code>\rightbkarrow, \dashrightarrow,</code>	↶	<code>\varleftwavearrow</code>
	<code>\dasharrow</code>	⤵	<code>\downwavearrow</code>
↑	<code>\upbkarrow</code>	↷	<code>\varrightwavearrow</code>
←	<code>\leftbkarrow, \dashleftarrow</code>	⤴	<code>\upwavearrow</code>
↓	<code>\downbkarrow</code>	↶	<code>\leftwavearrow,</code>
↗	<code>\nebkarrow</code>		<code>\leftsquigarrow,</code>
↖	<code>\nwbkarrow</code>		<code>\leftcurvedarrow</code>
↙	<code>\swbkarrow</code>	⤵	<code>\vardownwavearrow</code>
↘	<code>\sebkarrow</code>	↷↶	<code>\leftrightwavearrow,</code>
→	<code>\rightspoon, \multimap</code>		<code>\leftrightsquigarrow</code>
↑	<code>\upspoon, \circmid</code>	⤵	<code>\updownwavearrow</code>
←	<code>\leftspoon, \multimapinv</code>	↷↶	<code>\varleftrightwavearrow</code>
↓	<code>\downspoon, \midcir</code>	⤴	<code>\varupdownwavearrow</code>
→	<code>\rightblackspoon</code>	↷	<code>\cwoverarcarrow,</code>
↑	<code>\upblackspoon</code>		<code>\curvearrowright</code>
←	<code>\leftblackspoon</code>	↶	<code>\cwleftarcarrow</code>
↓	<code>\downblackspoon</code>	↷	<code>\cwunderarcarrow</code>
↔	<code>\leftrightspoon, \dualmap</code>	↷	<code>\cwrightarcarrow</code>
↔	<code>\leftrightblackspoon</code>	↗	<code>\cwnwarcarrow,</code>
↔	<code>\blackwhitespoon, \imageof</code>		<code>\rightupcurvedarrow</code>
↔	<code>\whiteblackspoon, \origof</code>	↶	<code>\cswarcarrow,</code>
⋈	<code>\rightpitchfork</code>		<code>\upleftcurvedarrow</code>
⋈	<code>\uppitchfork, \pitchfork</code>	↙	<code>\cwsearcarrow,</code>
⋈	<code>\leftpitchfork</code>		<code>\leftdowncurvedarrow</code>
⋈	<code>\downpitchfork</code>	↘	<code>\cwnearcarrow,</code>
⇒	<code>\rightrightarrows</code>		<code>\downrightcurvedarrow</code>
⇕	<code>\upuparrows</code>	↷	<code>\acwunderarcarrow</code>
⇐	<code>\leftleftarrows</code>	↷	<code>\acwrightarcarrow</code>
⇓	<code>\downdownarrows</code>	↶	<code>\acwoverarcarrow,</code>
↗	<code>\nenearrows</code>		<code>\curvearrowleft</code>
↖	<code>\nwnwarrows</code>	⤵	<code>\acwleftarcarrow</code>
↙	<code>\swswarrows</code>	↗	<code>\acwsearcarrow,</code>
↘	<code>\sesearrows</code>		<code>\uprightcurvearrow</code>
⇔	<code>\rightleftarrows</code>	↶	<code>\acwnearcarrow,</code>
⇕	<code>\updownarrows</code>		<code>\leftupcurvedarrow</code>
↗	<code>\neswarrows</code>	↙	<code>\acwnwarcarrow,</code>
↖	<code>\nwsearrows</code>		<code>\downleftcurvedarrow</code>
⇔	<code>\leftrightrightarrows</code>	↘	<code>\acswarcarrow,</code>
⇕	<code>\downuparrows</code>		<code>\rightdowncurvedarrow</code>
↗	<code>\swnearrows</code>	↷	<code>\bdoverarcarrow</code>
↖	<code>\senwarrows</code>	⤵	<code>\bdleftarcarrow</code>

\curvearrowright	<code>\bdunderarccarrow</code>	\Ldash	<code>\Ldash</code>
\curvearrowleft	<code>\bdrigharccarrow</code>	\Rdash	<code>\Rdash</code>
\curvearrowright	<code>\bdnwarccarrow</code>	\looparrowright	<code>\looparrowright</code>
\curvearrowleft	<code>\bdswarccarrow</code>	\looparrowleft	<code>\looparrowleft</code>
\curvearrowright	<code>\bdsearccarrow</code>	\vdash	<code>\rightvdash, \vdash</code>
\curvearrowleft	<code>\bdnearccarrow</code>	\perp	<code>\upvdash, \perp</code>
\dashleftarrow	<code>\leftfootline</code>	\dashleftarrow	<code>\leftvdash, \dashv</code>
\dashrightarrow	<code>\rightfootline</code>	\dashv	<code>\downvdash</code>
\circlearrowup	<code>\acwcircularrowup</code>	\dashv	<code>\rightassert, \assert,</code> <code>\shortrighttack</code>
\circlearrowleft	<code>\acwcircularrowleft,</code> <code>\circlearrowleft,</code> <code>\acwopencircularrow</code>	\uparrow	<code>\upassert, \shortuptack</code>
\circlearrowdown	<code>\acwcircularrowdown,</code> <code>\acwgapcircularrow</code>	\dashleftarrow	<code>\leftassert, \shortlefttack</code>
\circlearrowright	<code>\acwcircularrowright</code>	\dashv	<code>\downassert, \shortdowntack</code>
\circlearrowdown	<code>\cwcircularrowdown,</code> <code>\cwgapcircularrow</code>	\Vdash	<code>\rightvDash, \vDash</code>
\circlearrowright	<code>\cwcircularrowright,</code> <code>\circlearrowright,</code> <code>\cwopencircularrow</code>	\Uparrow	<code>\upvDash, \Vbar</code>
\circlearrowup	<code>\cwcircularrowup</code>	\dashleftarrow	<code>\leftvDash, \Dashv</code>
\circlearrowleft	<code>\cwcircularrowleft</code>	\Downarrow	<code>\downvDash, \bar{V}</code>
\Rightarrow	<code>\Rightarrow</code>	\models	<code>\rightmodels, \models</code>
\Uparrow	<code>\Uparrow</code>	\Uparrow	<code>\upmodels</code>
\Lleftarrow	<code>\Lleftarrow</code>	\dashleftarrow	<code>\leftmodels</code>
\Downarrow	<code>\Downarrow</code>	\dashv	<code>\downmodels</code>
\longrightarrow	<code>\longrightarrow</code>	\dashv	<code>\rightVdash, \Vdash</code>
\longleftarrow	<code>\longleftarrow</code>	\dashleftarrow	<code>\upVdash</code>
\Longrightarrow	<code>\Longrightarrow</code>	\dashleftarrow	<code>\leftVdash, \dashV</code>
\Longleftarrow	<code>\Longleftarrow</code>	\dashv	<code>\downVdash</code>
\longleftrightarrow	<code>\longleftrightarrow</code>	\dashv	<code>\rightAssert, \Assert</code>
\longmapsto	<code>\longmapsto</code>	\dashleftarrow	<code>\upAssert, \vBar</code>
\longmapsfrom	<code>\longmapsfrom</code>	\dashleftarrow	<code>\leftAssert</code>
\Longmapsto	<code>\Longmapsto</code>	\dashv	<code>\downAssert, \Barv</code>
\Longmapsfrom	<code>\Longmapsfrom</code>	\dashv	<code>\rightVDash, \VDash</code>
\rightsquigarrow	<code>\longrightwvearrow,</code> <code>\longleadsto,</code> <code>\longrightsquigarrow</code>	\dashleftarrow	<code>\upVDash</code>
\leftsquigarrow	<code>\longleftwvearrow,</code> <code>\longleftsquigarrow</code>	\dashleftarrow	<code>\leftVDash, \DashV</code>
\longleftfootline	<code>\longleftfootline, \vlongdash</code>	\dashv	<code>\downVDash</code>
\longrightfootline	<code>\longrightfootline, \longdashv</code>	\dashv	<code>\Vvdash</code>
\Lsh	<code>\Lsh</code>	\dashv	<code>\dashVv</code>
\Rsh	<code>\Rsh</code>	\dashv	<code>\vDdash</code>
		\dashv	<code>\Ddashv</code>
		\neq	<code>\nequal, \neq, \ne</code>
		\nequiv	<code>\nequiv</code>
		\sim	<code>\nsim</code>
		\backsimeq	<code>\nbacksim</code>
		\approx	<code>\napprox</code>
		$\triple sim$	<code>\ntriplesim, \napproxident</code>
		\simeq	<code>\nsimeq, \sime</code>
		\backsimeq	<code>\nbacksimeq</code>

\neq	<code>\neqsim</code>	\ngtr	<code>\ngtreqlslantless, \ngesl</code>
\cong	<code>\ncong</code>	\ll	<code>\nll</code>
\backcong	<code>\nbackcong</code>	\gg	<code>\ngg</code>
\approx	<code>\napproxeq</code>	\lll	<code>\nlll</code>
\bumpeq	<code>\nbumpeq</code>	\ggg	<code>\nggg</code>
\Bumpeq	<code>\nBumpeq</code>	\lessclosed	<code>\ntriangleleft</code>
\doteq	<code>\ndoteq</code>	\gtrclosed	<code>\ntriangleright</code>
\eqdot	<code>\neqdot</code>	\leqclosed	<code>\ntrianglelefteq</code>
\Doteq	<code>\nDoteq</code>	\geqclosed	<code>\ntrianglerighteq</code>
\fallingdotseq	<code>\nfallingdotseq</code>	\lesscc	<code>\nltcc</code>
\risingdotseq	<code>\nrisingdotseq</code>	\gtrcc	<code>\ngtcc</code>
\smile	<code>\nsmile</code>	\leqslcc	<code>\nlescc</code>
\frown	<code>\nfrown</code>	\geqslcc	<code>\ngescc</code>
\smilefrown	<code>\nsmilefrown, \nasymp</code>	\sqsubset	<code>\nsqsubset</code>
\frownsmile	<code>\nfrownsmile, \nclosure</code>	\sqsupset	<code>\nsqsupset</code>
\smileeq	<code>\nsmileeq</code>	\sqsubseteq	<code>\nsqsubseteq</code>
\frowneq	<code>\nfrowneq, \narceq</code>	\sqsupseteq	<code>\nsqsupseteq</code>
\neqcirc	<code>\neqcirc</code>	\subseteq	<code>\nsubseteq</code>
\ncirceq	<code>\ncirceq</code>	\supseteq	<code>\nsupseteq</code>
\wedgeeq	<code>\nwedgeeq, \nhateq</code>	\subset	<code>\nsubset</code>
\veeeq	<code>\nveeeq</code>	\supset	<code>\nsupset</code>
\stareq	<code>\nstareq</code>	\subseteq	<code>\nsubseteq</code>
\triangleleeq	<code>\ntriangleleeq</code>	\supseteq	<code>\nsupseteq</code>
\in	<code>\nin, \notin</code>	\subseteq	<code>\nsubseteq</code>
\owns	<code>\nowns, \nni</code>	\supseteq	<code>\nsupseteq</code>
\less	<code>\nless</code>	\subseteq	<code>\nsubseteq</code>
\gtr	<code>\ngtr</code>	\subseteq	<code>\nsubseteq</code>
\leq	<code>\nleq</code>	\subseteq	<code>\nsubseteq</code>
\geq	<code>\ngeq</code>	\subseteq	<code>\nsubseteq</code>
\leqslant	<code>\nleqslant</code>	\subseteq	<code>\nsubseteq</code>
\geqslant	<code>\ngeqslant</code>	\subseteq	<code>\nsubseteq</code>
\leqq	<code>\nleqq</code>	\subseteq	<code>\nsubseteq</code>
\geqq	<code>\ngeqq</code>	\subseteq	<code>\nsubseteq</code>
\lesssim	<code>\nlesssim</code>	\subseteq	<code>\nsubseteq</code>
\gtrsim	<code>\ngtrsim</code>	\subseteq	<code>\nsubseteq</code>
\lessapprox	<code>\nlessapprox</code>	\subseteq	<code>\nsubseteq</code>
\gtrapprox	<code>\ngtrapprox</code>	\subseteq	<code>\nsubseteq</code>
\lessgtr	<code>\nlessgtr</code>	\subseteq	<code>\nsubseteq</code>
\gtrless	<code>\ngtrless</code>	\subseteq	<code>\nsubseteq</code>
\lesseqgtr	<code>\nlesseqgtr</code>	\subseteq	<code>\nsubseteq</code>
\gtreqless	<code>\ngtreqless</code>	\subseteq	<code>\nsubseteq</code>
\lesseqqgtr	<code>\nlesseqqgtr</code>	\subseteq	<code>\nsubseteq</code>
\gtreqqless	<code>\ngtreqqless</code>	\subseteq	<code>\nsubseteq</code>
\lesseqslantgtr	<code>\nlesseqslantgtr, \nlesg</code>	\subseteq	<code>\nsubseteq</code>

\neq	<code>\neqslantdot, \nesdot</code>	\nrightarrow	<code>\nNwarrow</code>
\ngeq	<code>\ngeqslantdot, \ngesdot</code>	\nswarrow	<code>\nSwarrow</code>
\neq	<code>\neqslantless</code>	\nsearrow	<code>\nSearrow</code>
\neq	<code>\neqslantgtr</code>	\leftrightarrow	<code>\nleftrightarrow</code>
\curlyeqprec	<code>\curlyeqprec</code>	\updownarrow	<code>\nupdownarrow</code>
\curlyeqsucc	<code>\curlyeqsucc</code>	\nrightarrow	<code>\nneswarrow</code>
\sim	<code>\simneqq</code>	\nwarrow	<code>\nnwsearrow</code>
\backsimeq	<code>\backsimneqq</code>	\Leftrightarrow	<code>\nLeftrightarrow</code>
\neq	<code>\lneq</code>	\updownarrow	<code>\nUpdownarrow</code>
\gneq	<code>\gneq</code>	\nrightarrow	<code>\nNeswarrow</code>
\lneqq, \lvertneqq	<code>\lneqq, \lvertneqq</code>	\nwarrow	<code>\nNwsearrow</code>
\gneqq, \gvertneqq	<code>\gneqq, \gvertneqq</code>	\twoheadrightarrow	<code>\ntwoheadrightarrow</code>
\lnsim	<code>\lnsim</code>	\twoheadleftarrow	<code>\ntwoheaduparrow</code>
\gnsim	<code>\gnsim</code>	\twoheadleftarrow	<code>\ntwoheadleftarrow</code>
\lnapprox	<code>\lnapprox</code>	\twoheadrightarrow	<code>\ntwoheaddownarrow</code>
\gnapprox	<code>\gnapprox</code>	\twoheadrightarrow	<code>\ntwoheadnearrow</code>
\sqsubsetneq	<code>\sqsubsetneq</code>	\twoheadrightarrow	<code>\ntwoheadnwarrow</code>
\sqsupsetneq	<code>\sqsupsetneq</code>	\twoheadrightarrow	<code>\ntwoheadswarrow</code>
\sqsubsetneqq	<code>\sqsubsetneqq</code>	\twoheadrightarrow	<code>\ntwoheadsearrow</code>
\sqsupsetneqq	<code>\sqsupsetneqq</code>	\rightarrowtail	<code>\nrightharpoonright</code>
$\subsetneq, \varsubsetneq$	<code>\subsetneq, \varsubsetneq</code>	\uparrowsymbol	<code>\nuparrowsymbol</code>
$\supsetneq, \varsupsetneq$	<code>\supsetneq, \varsupsetneq</code>	\leftarrowtail	<code>\nleftarrowtail</code>
$\subsetneqq, \varsubsetneqq$	<code>\subsetneqq, \varsubsetneqq</code>	\downarrowtail	<code>\ndownarrowtail</code>
$\supsetneqq, \varsupsetneqq$	<code>\supsetneqq, \varsupsetneqq</code>	\nearrowtail	<code>\nnearrowtail</code>
\precneq	<code>\precneq</code>	\nwarrowtail	<code>\nnwarrowtail</code>
\succneq	<code>\succneq</code>	\searrowtail	<code>\nswarrowtail</code>
\precneqq	<code>\precneqq</code>	\searrowtail	<code>\nsearrowtail</code>
\succneqq	<code>\succneqq</code>	\mapsto	<code>\nrightharpoonup, \nmapsto</code>
\precnsim	<code>\precnsim</code>	\upmapsto	<code>\nupmapsto, \nmapsto</code>
\succnsim	<code>\succnsim</code>	\leftmapsto	<code>\nleftmapsto, \nmapsto</code>
\precnapprox	<code>\precnapprox</code>	\downmapsto	<code>\ndownmapsto, \nmapsto</code>
\succnapprox	<code>\succnapprox</code>	\Rrightarrow	<code>\nRrightarrow, \nMapsto</code>
\rightarrow	<code>\rightarrow, \nto</code>	\Uparrow	<code>\nUpmapsto, \nMapsto</code>
\uparrow	<code>\uparrow</code>	\Leftarrow	<code>\nLeftmapsto, \nMapsto</code>
\leftarrow	<code>\leftarrow, \ngets</code>	\Downarrow	<code>\nDownmapsto, \nMapsto</code>
\downarrow	<code>\downarrow</code>	\hookrightarrow	<code>\nhookrightarrow</code>
\nearrow	<code>\nearrow</code>	\hookrightarrow	<code>\nhookuparrow</code>
\nwarrow	<code>\nwarrow</code>	\leftarrow	<code>\nvarhookleftarrow</code>
\swarrow	<code>\swarrow</code>	\downarrow	<code>\nvarhookdownarrow</code>
\searrow	<code>\searrow</code>	\nearrow	<code>\nvarhooknearrow</code>
\Rrightarrow	<code>\Rrightarrow</code>	\nwarrow	<code>\nhooknwarrow, \nhknwarrow</code>
\Uparrow	<code>\Uparrow</code>	\swarrow	<code>\nvarhookswarrow</code>
\Leftarrow	<code>\Leftarrow</code>	\searrow	<code>\nhooksearrow, \nhksearrow</code>
\Downarrow	<code>\Downarrow</code>	\rightarrow	<code>\nvarhookrightarrow</code>
\Nearrow	<code>\Nearrow</code>	\uparrow	<code>\nvarhookuparrow</code>

\hookleftarrow	<code>\hookleftarrow</code>	\Downarrow	<code>\ndownbkarrow</code>
\hookrightarrow	<code>\hookrightarrow</code>	∇	<code>\nnebkarrow</code>
\nearrow	<code>\nearrow, \nhknearrow</code>	\nwarrow	<code>\nnwbkarrow</code>
\searrow	<code>\searrow, \nhksearrow</code>	\swarrow	<code>\nswbkarrow</code>
\swarrow	<code>\swarrow, \nhkswarrow</code>	\Uparrow	<code>\nsebkarrow</code>
\nwarrow	<code>\nwarrow, \nhknearrow</code>	\spadespoonright	<code>\nrightharpoonright, \nmultimap</code>
\rightarrow	<code>\rightarrow</code>	\spadespoonleft	<code>\nupspoon, \ncirmid</code>
\leftarrow	<code>\leftarrow</code>	\spadespoonright	<code>\nleftspoon, \nmultimapinv</code>
\uparrow	<code>\uparrow</code>	\spadespoonleft	<code>\ndownspoon, \nmidcir</code>
\downarrow	<code>\downarrow</code>	\spadespoonright	<code>\nrightharpoonright</code>
\nearrow	<code>\nearrow</code>	\spadespoonleft	<code>\nupblackspoon</code>
\searrow	<code>\searrow</code>	\spadespoonright	<code>\nleftblackspoon</code>
\swarrow	<code>\swarrow</code>	\spadespoonleft	<code>\ndownblackspoon</code>
\nwarrow	<code>\nwarrow</code>	\spadespoonright	<code>\nleftrightspoon, \ndualmap</code>
\rightarrow	<code>\rightarrow</code>	\spadespoonleft	<code>\nleftrightblackspoon</code>
\leftarrow	<code>\leftarrow</code>	\spadespoonright	<code>\nblackwhitespoon, \nimageof</code>
\uparrow	<code>\uparrow</code>	\spadespoonleft	<code>\nwhiteblackspoon, \norigof</code>
\downarrow	<code>\downarrow</code>	\pitchfork	<code>\nrightharpoonright</code>
\nearrow	<code>\nearrow</code>	\pitchfork	<code>\nuppitchfork, \npitchfork</code>
\searrow	<code>\searrow</code>	\pitchfork	<code>\nleftpitchfork</code>
\swarrow	<code>\swarrow</code>	\pitchfork	<code>\ndownpitchfork</code>
\rightarrow	<code>\rightarrow</code>	\rightleftarrows	<code>\nrightrightarrows</code>
\leftarrow	<code>\leftarrow</code>	\Uparrow	<code>\nupuparrows</code>
\uparrow	<code>\uparrow</code>	\Leftarrow	<code>\nleftleftarrows</code>
\downarrow	<code>\downarrow</code>	\Downarrow	<code>\ndowndownarrows</code>
\nearrow	<code>\nearrow</code>	\nearrow	<code>\nnenearrows</code>
\searrow	<code>\searrow</code>	\nwarrow	<code>\nnwnwarrows</code>
\swarrow	<code>\swarrow</code>	\swarrow	<code>\nswswarrows</code>
\rightarrow	<code>\rightarrow</code>	\searrow	<code>\nsesearrows</code>
\leftarrow	<code>\leftarrow</code>	\rightarrow	<code>\nrightrightarrows</code>
\uparrow	<code>\uparrow</code>	\pitchfork	<code>\nupdownarrows</code>
\downarrow	<code>\downarrow</code>	\nearrow	<code>\nneswarrows</code>
\nearrow	<code>\nearrow</code>	\nwarrow	<code>\nnwsearrows</code>
\searrow	<code>\searrow</code>	\rightarrow	<code>\nleftrightharrows</code>
\swarrow	<code>\swarrow</code>	\pitchfork	<code>\ndownuparrows</code>
\rightarrow	<code>\rightarrow</code>	\searrow	<code>\nswnearrows</code>
\leftarrow	<code>\leftarrow</code>	\swarrow	<code>\nsenwarrows</code>
\uparrow	<code>\uparrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\downarrow	<code>\downarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\nearrow	<code>\nearrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\searrow	<code>\searrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\swarrow	<code>\swarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\rightarrow	<code>\rightarrow, \ndasharrow,</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\leftarrow	<code>\leftarrow, \ndashrightarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\uparrow	<code>\uparrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\downarrow	<code>\downarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\nearrow	<code>\nearrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\searrow	<code>\searrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\swarrow	<code>\swarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\rightarrow	<code>\rightarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>
\leftarrow	<code>\leftarrow</code>	\rightarrow	<code>\nrightharpoonright, \nleadsto,</code>

\leftarrow	<code>\leftwvearrow,</code>	\circlearrowleft	<code>\nacwcircularrowup</code>
	<code>\leftsquigarrow,</code>	\circlearrowleft	<code>\nacwcircularrowleft,</code>
	<code>\leftcurvedarrow</code>		<code>\ncircularrowleft,</code>
\downarrow	<code>\nvardownwvearrow</code>		<code>\nacwopencircularrow</code>
\leftrightarrow	<code>\leftrighwvearrow,</code>	\circlearrowdown	<code>\nacwcircularrowdown,</code>
	<code>\leftrightsquigarrow</code>		<code>\nacwgapcircularrow</code>
\updownarrow	<code>\nupdownwvearrow</code>	\circlearrowright	<code>\nacwcircularrowright</code>
\leftrightarrow	<code>\nvarleftrighwvearrow</code>	\circlearrowdown	<code>\ncwcircularrowdown,</code>
\updownarrow	<code>\nvarupdownwvearrow</code>		<code>\ncwgapcircularrow</code>
\curvearrowright	<code>\ncwoverarcarrow,</code>	\circlearrowright	<code>\ncwcircularrowright,</code>
	<code>\ncurvearrowright</code>		<code>\ncircularrowright,</code>
\leftarrow	<code>\ncwleftarcarrow</code>		<code>\ncwopencircularrow</code>
\leftarrow	<code>\ncwunderarcarrow</code>	\circlearrowup	<code>\ncwcircularrowup</code>
\rightarrow	<code>\ncwrightarcarrow</code>	\circlearrowleft	<code>\ncwcircularrowleft</code>
\rightarrow	<code>\ncwnwarcarrow,</code>	\rightarrow	<code>\nRightarrow</code>
	<code>\nrighupcurvedarrow</code>	\Uparrow	<code>\nUparrow</code>
\rightarrow	<code>\ncswarcarrow,</code>	\Leftarrow	<code>\nLleftarrow</code>
	<code>\nupleftcurvedarrow</code>	\Downarrow	<code>\nDdownarrow</code>
\rightarrow	<code>\ncwsearcarrow,</code>	\rightarrow	<code>\nlongrightarrow</code>
	<code>\nleftdowncurvedarrow</code>	\leftarrow	<code>\nlongleftarrow</code>
\rightarrow	<code>\ncwnearcarrow,</code>	\Rightarrow	<code>\nLongrightarrow</code>
	<code>\ndownrightcurvedarrow</code>	\Leftarrow	<code>\nLongleftarrow</code>
\leftarrow	<code>\nacwunderarcarrow</code>	\leftrightarrow	<code>\nlongleftrightrightarrow</code>
\rightarrow	<code>\nacwrightarcarrow</code>	\Leftrightarrow	<code>\nLongleftrightrightarrow</code>
\leftarrow	<code>\nacwoverarcarrow,</code>	\mapsto	<code>\nlongmapsto</code>
	<code>\ncurvearrowleft</code>	\mapsto	<code>\nlongmapsfrom</code>
\leftarrow	<code>\nacwleftarcarrow</code>	\Rightarrow	<code>\nLongmapsto</code>
\rightarrow	<code>\nacwsearcarrow,</code>	\Leftarrow	<code>\nLongmapsfrom</code>
	<code>\nuprightcurvearrow</code>	\rightsquigarrow	<code>\nlongrightwvearrow,</code>
\rightarrow	<code>\nacwnearcarrow,</code>		<code>\nlongleadsto,</code>
	<code>\nleftupcurvedarrow</code>		<code>\nlongrightsquigarrow</code>
\rightarrow	<code>\nacwnwarcarrow,</code>	\rightsquigarrow	<code>\nlongleftwvearrow,</code>
	<code>\ndownleftcurvedarrow</code>		<code>\nlongleftsquigarrow</code>
\rightarrow	<code>\nacswarcarrow,</code>	\dashrightarrow	<code>\nlongleftfootline,</code>
	<code>\nrighdowncurvedarrow</code>		<code>\nvlongdash</code>
\rightarrow	<code>\nbdoverarcarrow</code>	\dashrightarrow	<code>\nlongrightfootline,</code>
\leftarrow	<code>\nbdleftarcarrow</code>		<code>\nlongdashv</code>
\rightarrow	<code>\nbdunderarcarrow</code>	\dashv	<code>\nrighvdash, \nvdash</code>
\rightarrow	<code>\nbdrightarcarrow</code>	\perp	<code>\nupvdash, \nperp</code>
\rightarrow	<code>\nbdnwarcarrow</code>	\dashv	<code>\nleftvdash, \ndashv</code>
\rightarrow	<code>\nbdswarcarrow</code>	\dashv	<code>\ndownvdash</code>
\rightarrow	<code>\nbdsearcarrow</code>	$\#$	<code>\nrighassert, \nassert,</code>
\rightarrow	<code>\nbdnearcarrow</code>		<code>\nshortrighttack</code>
\dashrightarrow	<code>\nleftfootline</code>	\pm	<code>\nupassert, \nshortuptack</code>
\dashrightarrow	<code>\nrighfootline</code>	$\#$	<code>\nleftassert, \nshortlefttack</code>

\nrightarrow	<code>\ndownassert, \nshortdowntack</code>	$\#$	<code>\ndashVv</code>
$\#$	<code>\nrighTVdash, \nvDash</code>	$\#$	<code>\nvDdash</code>
$\#$	<code>\nupVDash, \nVbar</code>	$\#$	<code>\nDdashv</code>
$\#$	<code>\nleftVDash, \nDashv</code>	:	<code>:\, \mathratio</code>
$\#$	<code>\ndownvDash, \nbarV</code>	::	<code>\Colon</code>
$\#$	<code>\nrighmodels, \nmodels</code>	–	<code>\relbar</code>
$\#$	<code>\nupmodels</code>	\div	<code>\dotsminusdots</code>
$\#$	<code>\nleftmodels</code>	\times	<code>\rJoin</code>
$\#$	<code>\ndownmodels</code>	\times	<code>\lJoin</code>
$\#$	<code>\nrighVDash, \nVdash</code>	\bowtie	<code>\bowtie, \Join</code>
$\#$	<code>\nupVDash</code>	\propto	<code>\propto, \varpropto</code>
$\#$	<code>\nleftVDash, \ndashV</code>	∞	<code>\backpropto, \propfrom</code>
$\#$	<code>\ndownVDash</code>	\times	<code>\crossing</code>
$\#$	<code>\nrighAssert, \nAssert</code>	\emptyset	<code>\between</code>
$\#$	<code>\nupAssert, \nvBar</code>		<code>\shortmid</code>
$\#$	<code>\nleftAssert</code>		<code>\mid, \divides</code>
$\#$	<code>\ndownAssert, \nBarv</code>	+	<code>\nshortmid</code>
$\#$	<code>\nrighVDash, \nVDash</code>	†	<code>\nmid, \ndivides</code>
$\#$	<code>\nupVDash</code>		<code>\shortparallel</code>
$\#$	<code>\nleftVDash, \nDashV</code>		<code>\parallel</code>
$\#$	<code>\ndownVDash</code>	#	<code>\nshortparallel</code>
$\#$	<code>\nVvdash</code>	#	<code>\nparallel</code>

5.4 Punctuation symbols

\cdot	<code>\cdot, \cdotp</code>	:	<code>\colon, \mathcolon</code>
---------	----------------------------	---	---------------------------------

5.5 Large operators

$+$	\bigplus	\cup	\bigcup	<code>\bigcupdot</code>
\times	\bigtimes	\oplus	\bigoplus	<code>\bigcupplus</code>
\wedge	\bigwedge	\oplus	\bigoplus	<code>\bigcupplus, \biguplus</code>
\vee	\bigvee	\sqcap	\bigcap	<code>\bigsqcap</code>
$\dot{\wedge}$	\bigwedgedot	\sqcup	\bigcup	<code>\bigsqcup</code>
$\dot{\vee}$	\bigveedot	\cdot	\bigcap	<code>\bigsqcapdot</code>
\AA	$\bigdoublewedge, \conjquant$	\cdot	\bigcup	<code>\bigsqcupdot</code>
\textbackslash	$\bigdoublevee, \disjquant$	\oplus	\bigcap	<code>\bigsqcapplus</code>
\textbackslash	\bigcurlywedge	\oplus	\bigcup	<code>\bigsqcupplus</code>
\textbackslash	\bigcurlyvee	\oplus	\bigcap	<code>\bigoplus</code>
\cap	\bigcap	\otimes	\bigcup	<code>\bigotimes</code>
\cup	\bigcup	\odot	\bigcap	<code>\bigodot</code>
\cap	\bigcapdot	\otimes	\bigcup	<code>\bigodot</code>
		\prod	\bigcap	<code>\bigodot</code>
		\prod	\bigcup	<code>\bigodot</code>
			\bigcap	<code>\prod</code>
			\bigcup	<code>\prod</code>

\prod	\prod	<code>\varprod</code>	\oint	\oint	<code>\oint</code>
\coprod	\coprod	<code>\coprod</code>	\oiint	\oiint	<code>\oiint</code>
\varinjlim	\varinjlim	<code>\varinjlim</code>	\oiint	\oiint	<code>\oiint</code>
\sum	\sum	<code>\sum</code>	\oiint	\oiint	<code>\oiint</code>
\varinjlim	\varinjlim	<code>\varsum</code>	\oint	\oint	<code>\oint</code>
\sum	\sum	<code>\osum, \modtwosum</code>	\oint	\oint	<code>\rcircclerightint,</code> <code>\ointctrlockwise</code>
\sum	\sum	<code>\varosum, \varmodtwosum</code>	\oint	\oint	<code>\lcircclerightint,</code> <code>\varointclockwise</code>
\int	\int	<code>\int</code>	\oint	\oint	<code>\rcircleleftint,</code> <code>\varointctrlockwise</code>
\iint	\iint	<code>\iint</code>	\oint	\oint	<code>\lcircleleftint,</code> <code>\varointclockwise</code>
\iiint	\iiint	<code>\iiint</code>	\int	\int	<code>\sumint</code>
\iiint	\iiint	<code>\iiiint</code>	\int	\int	<code>\varsumint</code>
$\int \dots \int$	$\int \dots \int$	<code>\idotsint, \dotsint</code>	\prod	\prod	<code>\smallprod</code>
\int	\int	<code>\landupint, \intclockwise</code>	\prod	\prod	<code>\varsmallprod</code>
\int	\int	<code>\landdownint, \awint,</code> <code>\intctrlockwise</code>	\coprod	\coprod	<code>\smallcoprod</code>
\int	\int	<code>\intbar</code>	\coprod	\coprod	<code>\varsmallcoprod</code>
\int	\int	<code>\intBar</code>	\int	\int	<code>\smallint</code>
\int	\int	<code>\fint</code>	$\sqrt{\quad}$	$\sqrt{\quad}$	<code>\surd</code>

5.6 Delimiters and accents

$((((($	<code>(, \lparen</code>	\ulcorner	<code>\ulcorner</code>
$))))$	<code>), \rparen</code>	\urcorner	<code>\urcorner</code>
$[[[[$	<code>[, \lbrack</code>	\llcorner	<code>\llcorner</code>
$]]]]$	<code>], \rbrack</code>	\lrcorner	<code>\lrcorner</code>
\lfloor	<code>\lfloor</code>	\ulcorner	<code>\ulcorner</code>
\rfloor	<code>\rfloor</code>	\urcorner	<code>\urcorner</code>
\lceil	<code>\lceil</code>	\llcorner	<code>\llcorner</code>
\rceil	<code>\rceil</code>	\lrcorner	<code>\lrcorner</code>

$\{\{\{\{\}$	<code>\lbrace, \{</code>	$\ \ \ \ \ \ \ \ $	<code>\Vvert</code>
$\}\}\}\}$	<code>\rbrace, \}</code>	$\ \ \ \ \ \ \ \ $	<code>\lVvert</code>
$\langle\langle\langle\langle$	<code>\langle</code>	$\ \ \ \ \ \ \ \ $	<code>\rVvert</code>
$\rangle\rangle\rangle\rangle$	<code>\rangle</code>	$\uparrow\uparrow\uparrow$	<code>\arrowvert</code>
$\langle\langle\langle\langle\langle\langle$	<code>\lAngle</code>	$\uparrow\uparrow\uparrow\uparrow$	<code>\Arrowvert</code>
$\rangle\rangle\rangle\rangle\rangle\rangle$	<code>\rAngle</code>	$\left[\left[\left[\left[$	<code>\lgroup</code>
$\langle\cdot\cdot\cdot\cdot\langle\langle$	<code>\langedot</code>	$\right]\right]\right]\right]$	<code>\rgroup</code>
$\rangle\rangle\rangle\rangle\cdot\cdot\rangle\rangle$	<code>\rangedot</code>	$\int\int\int\int$	<code>\lmoustache</code>
$\//\//\//$	<code>/, \mathslash</code>	$\{\}\{\}\{\}$	<code>\rmoustache</code>
$\backslash\backslash\backslash\backslash$	<code>\backslash</code>	$\updownarrow\updownarrow$	<code>\bracevert</code>
$\ \ \ \ $	<code> , \vert</code>	$\uparrow\uparrow\uparrow\uparrow$	<code>\uparrow</code>
$\ \ \ \ $	<code>\lvert</code>	$\downarrow\downarrow\downarrow\downarrow$	<code>\downarrow</code>
$\ \ \ \ $	<code>\rvert</code>	$\updownarrow\updownarrow\updownarrow$	<code>\updownarrow</code>
$\ \ \ \ \ \ \ \ $	<code>\Vert, \lVert</code>	$\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow$	<code>\Uparrow</code>
$\ \ \ \ \ \ \ \ $	<code>\lVert</code>	$\downarrow\downarrow\downarrow\downarrow\downarrow\downarrow$	<code>\Downarrow</code>
$\ \ \ \ \ \ \ \ $	<code>\rVert</code>	$\updownarrow\updownarrow\updownarrow\updownarrow$	<code>\Updownarrow</code>
\overbrace{xxx}	<code>\overbrace</code>	\overline{xxx}	<code>\overline{xxx}</code>
\underbrace{xxx}	<code>\underbrace</code>	\overleftarrow{xxx}	<code>\overleftarrow{xxx}</code>
\overgroup{xxx}	<code>\overgroup</code>	\overrightarrow{xxx}	<code>\overrightarrow{xxx}</code>
\undergroup{xxx}	<code>\undergroup</code>	\underline{xxx}	<code>\underline{xxx}</code>
\sqrt{b}	<code>\sqrt{b}</code>	\vec{b}	<code>\vec{b}</code>
\widehat{xxx}	<code>\widehat{xxx}</code>	\bar{b}	<code>\middlebar</code>
\widetilde{xxx}	<code>\widetilde{xxx}</code>	\b	<code>\middleslash</code>
\wideparen{xxx}	<code>\wideparen{xxx}</code>	\cancel{b}	<code>\strokethrough</code>

5.7 Faked symbols

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

\dagger	<code>\dagger</code>	\mathbb{k}	<code>\Bbbk</code>
\ddagger	<code>\ddagger</code>	\Re	<code>\Re</code>
\mathparagraph	<code>\mathparagraph</code>	\Im	<code>\Im</code>
\S	<code>\mathsection</code>	\hbar	<code>\hbar</code>
$\$$	<code>\mathdollar</code>	\hslash	<code>\hslash</code>
\pounds	<code>\mathsterling</code>	\textcircled{R}	<code>\circledR</code>
\yen	<code>\yen</code>	\textcircled{S}	<code>\circledS</code>

5.8 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>\rhook</code>
<code>\nabla</code>	<code>\backepsilon</code>	<code>\diagup</code>
<code>\eth</code>	<code>\mapstochar</code>	<code>\diagdown</code>
<code>\digamma</code>	<code>\lhook</code>	

6 Implementation

```

1 (*style)
2 \RequirePackage{xkeyval}
3 \newcommand*\fdsy@choicekey[3]{%
4   \define@choicekey*{fdsymbol.sty}{#1}[\@tempa\@tempb]{#2}{#3}%
5 }

```

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

```

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

```

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

```

7 \newcommand{\fdsy@scale}{1.0}
8 \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.

```

9 \newcommand\fdsy@mweight@normal{Book}
10 \newcommand\fdsy@mweight@small{Book}
11 \newcommand\fdsy@bweight@normal{Medium}
12 \newcommand\fdsy@bweight@small{Medium}
13 \fdsy@choicekey{normalweight}{book,regular,auto}{%
14   \ifcase\@tempb\relax
15     \renewcommand\fdsy@mweight@normal{Book}%
16     \renewcommand\fdsy@mweight@small{Book}%

```

```

17 \or
18 \renewcommand\fdsy@mweight@normal{Demi}%
19 \renewcommand\fdsy@mweight@small{Demi}%
20 \or
21 \renewcommand\fdsy@mweight@normal{Book}%
22 \renewcommand\fdsy@mweight@small{Demi}%
23 \fi
24 }
25 \fdsy@choicekey{boldweight}{medium,bold,auto}{%
26 \ifcase\@tempb\relax
27 \renewcommand\fdsy@bweight@normal{Medium}%
28 \renewcommand\fdsy@bweight@small{Medium}%
29 \or
30 \renewcommand\fdsy@bweight@normal{Bold}%
31 \renewcommand\fdsy@bweight@small{Bold}%
32 \or
33 \renewcommand\fdsy@bweight@normal{Medium}%
34 \renewcommand\fdsy@bweight@small{Bold}%
35 \fi
36 }

```

Finally, the following option controls the style of large operators.

```

37 \newif\iffdsy@sfp
38 \fdsy@choicekey{opstyle}{serif,sans}{%
39 \ifcase\@tempb\relax
40 \fdsy@sfpfalse
41 \or
42 \fdsy@sfptrue
43 \fi
44 }
45 \ExecuteOptionsX{largedelims=false,opstyle=serif}
46 \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.

```

47 \@ifpackageloaded{amsmath}{}{\RequirePackage{amsmath}}
48 \@ifpackageloaded{textcomp}{}{\RequirePackage{textcomp}}

```

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.

```

49 \iffdsy@largedelims
50 \renewcommand{\Big}{\bBigg@{1.25}}
51 \renewcommand{\bigg}{\bBigg@{1.66}}
52 \renewcommand{\Bigg}{\bBigg@{2.08}}
53 \fi

```

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

```

54 \DeclareRobustCommand{\dagger}{\fdsy@text{\textdagger}}
55 \DeclareRobustCommand{\ddagger}{\fdsy@text{\textdaggerdbl}}
56 \DeclareRobustCommand{\mathparagraph}{\fdsy@text{\textparagraph}}
57 \DeclareRobustCommand{\mathsection}{\fdsy@text{\textsection}}

```

```

58 \DeclareRobustCommand{\mathdollar}{\fdsy@text{\textdollar}}
59 \DeclareRobustCommand{\mathsterling}{\fdsy@text{\textsterling}}
60 \DeclareRobustCommand{\yen}{\fdsy@text{\textyen}}
61 \DeclareRobustCommand{\circledR}{\fdsy@text{\textcircled{%
62   \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont R}}}
63 \DeclareRobustCommand{\circledS}{\fdsy@text{\textcircled{%
64   \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont S}}}
65 \DeclareRobustCommand{\Re}{\mathfrak{R}}
66 \DeclareRobustCommand{\Im}{\mathfrak{I}}
67 \DeclareRobustCommand{\dotcong}{\mathrel{\dot{\cong}}}
68 \DeclareRobustCommand{\thicksim}{\mathrel{\text{\boldmath$\m@th\sim$}}}
69 \DeclareRobustCommand{\thickapprox}{\mathrel{\text{\boldmath$\m@th\approx$}}}
70 \let\hbar\undefined
71 \let\hslash\undefined
72 \DeclareRobustCommand{\hbar}{\middlebar h}
73 \DeclareRobustCommand{\hslash}{\middleslash h}
74 \DeclareRobustCommand{\centerdot}{\mathbin{\rule{0.15em}{0.15em}}}

```

Unneeded partial symbols.

```

75 \let\mapstochar\undefined
76 \let\lhook\undefined
77 \let\rhook\undefined

```

Shorthands to simplify the definitions below.

```

78 \newcommand\fdsy@setslot[1]{\@tempcnta #1\relax}
79 \newcommand\fdsy@nextslot{\advance\@tempcnta 1\relax}
80 \newcommand\fdsy@prevslot{\advance\@tempcnta-1\relax}
81
82 \newcommand\fdsy@@DeclareSymbol[4]{\DeclareMathSymbol{#2}{#3}{#4}{#1}}
83 \newcommand\fdsy@DeclareSymbol[3]{%
84   \if\relax\noexpand#1\let#1\undefined\fi
85   \expandafter\fdsy@@DeclareSymbol\expandafter{\the\@tempcnta}{#1}{#3}{#2}%
86   \fdsy@nextslot
87 }
88 \newcommand\fdsy@DeclareAlias[3]{\fdsy@prevslot\fdsy@DeclareSymbol{#1}{#2}{#3}}
89 \newcommand\fdsy@DeclareOperator[3]{\def#1{\DOTSB#3\limits@}}
90 \newcommand\fdsy@DeclareIntegral[3]{\def#1{\DOTSI#3\ilimits@}}
91 \newcommand\fdsy@DeclareDelimiter[4]{%
92   \if\relax\noexpand#1\let#1\undefined\fi
93   \DeclareMathDelimiter{#1}{#2}{#3}{#4}{#3}{#4}%
94 }
95 \newcommand\fdsy@DeclareOpen[3]{\fdsy@DeclareDelimiter{#1}{\mathopen}{#2}{#3}}
96 \newcommand\fdsy@DeclareClose[3]{\fdsy@DeclareDelimiter{#1}{\mathclose}{#2}{#3}}

```

Font definitions.

```

97 \DeclareFontFamily{U}{FdSymbolA}{}
98 \DeclareFontFamily{U}{FdSymbolB}{}
99 \DeclareFontFamily{U}{FdSymbolC}{}
100 \DeclareFontFamily{U}{FdSymbolD}{}
101 \DeclareFontFamily{U}{FdSymbolE}{}
102 \DeclareFontFamily{U}{FdSymbolF}{}

```

```

103
104 \DeclareFontShape{U}{FdSymbolA}{m}{n}{
105   <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@weight@small
106   <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@weight@normal
107 }{}
108 \DeclareFontShape{U}{FdSymbolA}{b}{n}{
109   <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@bweight@small
110   <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@bweight@normal
111 }{}
112 \DeclareFontShape{U}{FdSymbolB}{m}{n}{
113   <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@weight@small
114   <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@weight@normal
115 }{}
116 \DeclareFontShape{U}{FdSymbolB}{b}{n}{
117   <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@bweight@small
118   <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@bweight@normal
119 }{}
120 \DeclareFontShape{U}{FdSymbolC}{m}{n}{
121   <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@weight@small
122   <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@weight@normal
123 }{}
124 \DeclareFontShape{U}{FdSymbolC}{b}{n}{
125   <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@bweight@small
126   <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@bweight@normal
127 }{}
128 \DeclareFontShape{U}{FdSymbolD}{m}{n}{
129   <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@weight@small
130   <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@weight@normal
131 }{}
132 \DeclareFontShape{U}{FdSymbolD}{b}{n}{
133   <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@bweight@small
134   <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@bweight@normal
135 }{}
136 \DeclareFontShape{U}{FdSymbolE}{m}{n}{
137   <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@weight@small
138   <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@weight@normal
139 }{}
140 \DeclareFontShape{U}{FdSymbolE}{b}{n}{
141   <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@bweight@small
142   <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@bweight@normal
143 }{}
144 \DeclareFontShape{U}{FdSymbolF}{m}{n}{
145   <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@weight@small
146   <7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@weight@normal
147 }{}
148 \DeclareFontShape{U}{FdSymbolF}{b}{n}{
149   <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@bweight@small
150   <7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@bweight@normal
151 }{}

```

```

152
153 \DeclareSymbolFont{symbols}{U}{FdSymbolA}{m}{n}
154 \DeclareSymbolFont{relations}{U}{FdSymbolB}{m}{n}
155 \DeclareSymbolFont{arrows}{U}{FdSymbolC}{m}{n}
156 \DeclareSymbolFont{narrows}{U}{FdSymbolD}{m}{n}
157 \DeclareSymbolFont{largesymbols}{U}{FdSymbolE}{m}{n}
158 \DeclareSymbolFont{delimiters}{U}{FdSymbolF}{m}{n}
159 \SetSymbolFont{symbols}{bold}{U}{FdSymbolA}{b}{n}
160 \SetSymbolFont{relations}{bold}{U}{FdSymbolB}{b}{n}
161 \SetSymbolFont{arrows}{bold}{U}{FdSymbolC}{b}{n}
162 \SetSymbolFont{narrows}{bold}{U}{FdSymbolD}{b}{n}
163 \SetSymbolFont{largesymbols}{bold}{U}{FdSymbolE}{b}{n}
164 \SetSymbolFont{delimiters}{bold}{U}{FdSymbolF}{b}{n}

```

At the moment, we still use `cmsy` for the calligraphic alphabet, `msb` for the blackboard bold alphabet, and `euf` for the Fraktur alphabet.

```

165 \DeclareMathAlphabet{\mathcal}{OMS}{cmsy}{m}{n}
166 \SetMathAlphabet{\mathcal}{bold}{OMS}{cmsy}{b}{n}
167 \DeclareMathAlphabet{\mathbb}{U}{msb}{m}{n}
168 \DeclareMathAlphabet{\mathfrak}{U}{euf}{m}{n}
169 \SetMathAlphabet{\mathfrak}{bold}{U}{euf}{b}{n}
170 \let\Bbbk\undefined
171 \newcommand{\Bbbk}{\mathbb{\mathchar"717C}}

```

A command for taking math symbols from the text font.

```

172 \def\fdsy@bold{bold}
173 \newcommand*\fdsy@text[1]{%
174   \ifx\fdsy@bold\math@version
175     \text{\normalfont\bfseries#1}%
176   \else
177     \text{\normalfont\mdseries#1}%
178   \fi
179 }

```

FdSymbolA: binary operators and ordinary symbols

```

180 \fdsy@setslot{0}
181 \fdsy@DeclareSymbol{\cdot}{symbols}{\mathbin}
182 \fdsy@DeclareAlias{\cdotp}{symbols}{\mathpunct}
183 \fdsy@DeclareSymbol{\hdotdot}{symbols}{\mathbin}
184 \fdsy@DeclareSymbol{\vdotdot}{symbols}{\mathbin}
185 \fdsy@DeclareAlias{\colon}{symbols}{\mathpunct}
186 \fdsy@DeclareAlias{\mathcolon}{symbols}{\mathpunct}
187 \fdsy@DeclareAlias{\mathratio}{symbols}{\mathrel}
188 \fdsy@DeclareSymbol{\udotdot}{symbols}{\mathbin}
189 \fdsy@DeclareSymbol{\ddotdot}{symbols}{\mathbin}
190 \fdsy@DeclareSymbol{\hdots}{symbols}{\mathord}
191 \fdsy@DeclareAlias{\@cdots}{symbols}{\mathinner}
192 \let\cdots\@cdots
193 \fdsy@DeclareSymbol{\@vdots}{symbols}{\mathord}
194 \DeclareRobustCommand{\vdots}{\ifmmode\@vdots\else\hbox{\$ \@vdots \$}\fi}
195 \fdsy@DeclareSymbol{\udots}{symbols}{\mathord}

```

```

196 \fdsy@DeclareAlias{\adots}{symbols}{\mathord}
197 \fdsy@DeclareSymbol{\ddots}{symbols}{\mathord}
198 \fdsy@DeclareSymbol{\righttherefore}{symbols}{\mathord}
199 \fdsy@DeclareSymbol{\uptherefore}{symbols}{\mathord}
200 \fdsy@DeclareAlias{\therefore}{symbols}{\mathord}
201 \fdsy@DeclareSymbol{\lefttherefore}{symbols}{\mathord}
202 \fdsy@DeclareSymbol{\downtherefore}{symbols}{\mathord}
203 \fdsy@DeclareAlias{\because}{symbols}{\mathord}
204 \fdsy@DeclareSymbol{\squaredots}{symbols}{\mathord}
205 \fdsy@DeclareAlias{\Colon}{symbols}{\mathrel}
206 \fdsy@DeclareSymbol{\minus}{symbols}{\mathbin}
207 \fdsy@DeclareSymbol{\medslash}{symbols}{\mathbin}
208 \fdsy@DeclareAlias{\smalldivslash}{symbols}{\mathbin}
209 \fdsy@DeclareSymbol{\medbackslash}{symbols}{\mathbin}
210 \fdsy@DeclareAlias{\smallsetminus}{symbols}{\mathbin}
211 \fdsy@DeclareSymbol{\plus}{symbols}{\mathbin}
212 \fdsy@DeclareSymbol{\times}{symbols}{\mathbin}
213 \fdsy@DeclareSymbol{\dotminus}{symbols}{\mathbin}
214 \fdsy@DeclareSymbol{\minusdot}{symbols}{\mathbin}
215 \fdsy@DeclareSymbol{\div}{symbols}{\mathbin}
216 \fdsy@DeclareSymbol{\minusfdots}{symbols}{\mathbin}
217 \fdsy@DeclareSymbol{\minusrdots}{symbols}{\mathbin}
218 \fdsy@DeclareSymbol{\dotsminusdots}{symbols}{\mathrel}
219 \fdsy@DeclareSymbol{\pm}{symbols}{\mathbin}
220 \fdsy@DeclareSymbol{\mp}{symbols}{\mathbin}
221 \fdsy@DeclareSymbol{\dotplus}{symbols}{\mathbin}
222 \fdsy@DeclareSymbol{\plusdot}{symbols}{\mathbin}
223 \fdsy@DeclareSymbol{\dottimes}{symbols}{\mathbin}
224 \fdsy@DeclareSymbol{\timesbar}{symbols}{\mathbin}
225 \fdsy@DeclareSymbol{\divideontimes}{symbols}{\mathbin}
226 \fdsy@DeclareSymbol{\neg}{symbols}{\mathord}
227 \fdsy@DeclareAlias{\lnot}{symbols}{\mathord}
228 \fdsy@DeclareAlias{\minushookdown}{symbols}{\mathbin}
229 \fdsy@DeclareSymbol{\backneg}{symbols}{\mathord}
230 \fdsy@DeclareAlias{\hookdownminus}{symbols}{\mathbin}
231 \fdsy@DeclareAlias{\invneg}{symbols}{\mathord}
232 \fdsy@DeclareAlias{\invnot}{symbols}{\mathord}
233 \fdsy@DeclareSymbol{\intprod}{symbols}{\mathbin}
234 \fdsy@DeclareAlias{\minushookup}{symbols}{\mathbin}
235 \fdsy@DeclareAlias{\turnedneg}{symbols}{\mathord}
236 \fdsy@DeclareAlias{\turnednot}{symbols}{\mathord}
237 \fdsy@DeclareSymbol{\intprodr}{symbols}{\mathbin}
238 \fdsy@DeclareAlias{\hookupminus}{symbols}{\mathbin}
239 \fdsy@DeclareAlias{\turnedbackneg}{symbols}{\mathord}
240 \fdsy@DeclareSymbol{\leftthreetimes}{symbols}{\mathbin}
241 \fdsy@DeclareSymbol{\rightthreetimes}{symbols}{\mathbin}
242 \fdsy@DeclareSymbol{\dtimes}{symbols}{\mathbin}
243 \fdsy@DeclareAlias{\btimes}{symbols}{\mathbin}
244 \fdsy@DeclareSymbol{\rtimes}{symbols}{\mathbin}

```

```

245 \fdsy@DeclareAlias{\rJoin}{symbols}{\mathrel}
246 \fdsy@DeclareSymbol{\utimes}{symbols}{\mathbin}
247 \fdsy@DeclareAlias{\ttimes}{symbols}{\mathbin}
248 \fdsy@DeclareSymbol{\ltimes}{symbols}{\mathbin}
249 \fdsy@DeclareAlias{\lJoin}{symbols}{\mathrel}
250 \fdsy@DeclareSymbol{\bowtie}{symbols}{\mathrel}
251 \fdsy@DeclareAlias{\Join}{symbols}{\mathrel}
252 \fdsy@DeclareAlias{\lrtimes}{symbols}{\mathbin}
253 \fdsy@DeclareSymbol{\upbowtie}{symbols}{\mathbin}
254 \fdsy@DeclareAlias{\hourglass}{symbols}{\mathbin}
255 \fdsy@DeclareSymbol{\rightY}{symbols}{\mathbin}
256 \fdsy@DeclareSymbol{\upY}{symbols}{\mathbin}
257 \fdsy@DeclareSymbol{\leftY}{symbols}{\mathbin}
258 \fdsy@DeclareSymbol{\downY}{symbols}{\mathbin}
259 \fdsy@DeclareSymbol{\wedge}{symbols}{\mathbin}
260 \fdsy@DeclareAlias{\land}{symbols}{\mathbin}
261 \fdsy@DeclareSymbol{\vee}{symbols}{\mathbin}
262 \fdsy@DeclareAlias{\lor}{symbols}{\mathbin}
263 \fdsy@DeclareSymbol{\wedgedot}{symbols}{\mathbin}
264 \fdsy@DeclareSymbol{\veedot}{symbols}{\mathbin}
265 \fdsy@DeclareSymbol{\doublewedge}{symbols}{\mathbin}
266 \fdsy@DeclareAlias{\wedgeonwedge}{symbols}{\mathbin}
267 \fdsy@DeclareSymbol{\doublevee}{symbols}{\mathbin}
268 \fdsy@DeclareAlias{\veeonvee}{symbols}{\mathbin}
269 \fdsy@DeclareSymbol{\curlywedge}{symbols}{\mathbin}
270 \fdsy@DeclareSymbol{\curlyvee}{symbols}{\mathbin}
271 \fdsy@DeclareSymbol{\barwedge}{symbols}{\mathbin}
272 \fdsy@DeclareSymbol{\veebar}{symbols}{\mathbin}
273 \fdsy@DeclareSymbol{\doublebarwedge}{symbols}{\mathbin}
274 \fdsy@DeclareSymbol{\veedoublebar}{symbols}{\mathbin}
275 \fdsy@DeclareSymbol{\cup}{symbols}{\mathbin}
276 \fdsy@DeclareSymbol{\cap}{symbols}{\mathbin}
277 \fdsy@DeclareSymbol{\doublecup}{symbols}{\mathbin}
278 \fdsy@DeclareAlias{\Cup}{symbols}{\mathbin}
279 \fdsy@DeclareSymbol{\doublecap}{symbols}{\mathbin}
280 \fdsy@DeclareAlias{\Cap}{symbols}{\mathbin}
281 \fdsy@DeclareSymbol{\cupdot}{symbols}{\mathbin}
282 \fdsy@DeclareSymbol{\capdot}{symbols}{\mathbin}
283 \fdsy@DeclareSymbol{\cupplus}{symbols}{\mathbin}
284 \fdsy@DeclareAlias{\uplus}{symbols}{\mathbin}
285 \fdsy@DeclareSymbol{\capplus}{symbols}{\mathbin}
286 \fdsy@DeclareSymbol{\sqcup}{symbols}{\mathbin}
287 \fdsy@DeclareSymbol{\sqcap}{symbols}{\mathbin}
288 \fdsy@DeclareSymbol{\doublesqcup}{symbols}{\mathbin}
289 \fdsy@DeclareAlias{\Sqcup}{symbols}{\mathbin}
290 \fdsy@DeclareSymbol{\doublesqcap}{symbols}{\mathbin}
291 \fdsy@DeclareAlias{\Sqcap}{symbols}{\mathbin}
292 \fdsy@DeclareSymbol{\sqcupdot}{symbols}{\mathbin}
293 \fdsy@DeclareSymbol{\sqcapdot}{symbols}{\mathbin}

```



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294 \fdsy@DeclareSymbol{\sqcupplus}{symbols}{\mathbin}
295 \fdsy@DeclareSymbol{\sqcapplus}{symbols}{\mathbin}
296 \fdsy@DeclareSymbol{\pullback}{symbols}{\mathbin}
297 \fdsy@DeclareSymbol{\pushout}{symbols}{\mathbin}
298 \fdsy@DeclareSymbol{\smalltriangleright}{symbols}{\mathbin}
299 \fdsy@DeclareSymbol{\smalltriangleup}{symbols}{\mathbin}
300 \fdsy@DeclareSymbol{\smalltriangleleft}{symbols}{\mathbin}
301 \fdsy@DeclareSymbol{\smalltriangledown}{symbols}{\mathbin}
302 \fdsy@DeclareSymbol{\smallblacktriangleright}{symbols}{\mathbin}
303 \fdsy@DeclareSymbol{\smallblacktriangleup}{symbols}{\mathbin}
304 \fdsy@DeclareSymbol{\smallblacktriangleleft}{symbols}{\mathbin}
305 \fdsy@DeclareSymbol{\smallblacktriangledown}{symbols}{\mathbin}
306 \fdsy@DeclareSymbol{\medtriangleright}{symbols}{\mathbin}
307 \fdsy@DeclareAlias{\triangleright}{symbols}{\mathbin}
308 \fdsy@DeclareSymbol{\medtriangleup}{symbols}{\mathbin}
309 \fdsy@DeclareAlias{\triangle}{symbols}{\mathbin}
310 \fdsy@DeclareAlias{\vartriangle}{symbols}{\mathbin}
311 \fdsy@DeclareSymbol{\medtriangleleft}{symbols}{\mathbin}
312 \fdsy@DeclareAlias{\triangleleft}{symbols}{\mathbin}
313 \fdsy@DeclareSymbol{\medtriangledown}{symbols}{\mathbin}
314 \fdsy@DeclareAlias{\triangledown}{symbols}{\mathbin}
315 \fdsy@DeclareSymbol{\medblacktriangleright}{symbols}{\mathbin}
316 \fdsy@DeclareAlias{\blacktriangleright}{symbols}{\mathbin}
317 \fdsy@DeclareSymbol{\medblacktriangleup}{symbols}{\mathbin}
318 \fdsy@DeclareAlias{\blacktriangle}{symbols}{\mathbin}
319 \fdsy@DeclareSymbol{\medblacktriangleleft}{symbols}{\mathbin}
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321 \fdsy@DeclareSymbol{\medblacktriangledown}{symbols}{\mathbin}
322 \fdsy@DeclareAlias{\blacktriangledown}{symbols}{\mathbin}
323 \fdsy@DeclareSymbol{\largetriangleup}{symbols}{\mathord}
324 \fdsy@DeclareAlias{\bigtriangleup}{symbols}{\mathbin}
325 \fdsy@DeclareSymbol{\largetriangledown}{symbols}{\mathord}
326 \fdsy@DeclareAlias{\bigtriangledown}{symbols}{\mathbin}
327 \fdsy@DeclareSymbol{\smallcircle}{symbols}{\mathbin}
328 \fdsy@DeclareAlias{\circ}{symbols}{\mathbin}
329 \fdsy@DeclareAlias{\smwhtcircle}{symbols}{\mathbin}
330 \fdsy@DeclareSymbol{\smallblackcircle}{symbols}{\mathbin}
331 \fdsy@DeclareAlias{\bullet}{symbols}{\mathbin}
332 \fdsy@DeclareAlias{\smbkcircle}{symbols}{\mathbin}
333 \fdsy@DeclareSymbol{\medcircle}{symbols}{\mathbin}
334 \fdsy@DeclareAlias{\mdlgwhtcircle}{symbols}{\mathbin}
335 \fdsy@DeclareSymbol{\medblackcircle}{symbols}{\mathbin}
336 \fdsy@DeclareAlias{\mdlgblkcircle}{symbols}{\mathbin}
337 \fdsy@DeclareSymbol{\ominus}{symbols}{\mathbin}
338 \fdsy@DeclareSymbol{\overt}{symbols}{\mathbin}
339 \fdsy@DeclareAlias{\circledvert}{symbols}{\mathbin}
340 \fdsy@DeclareSymbol{\oslash}{symbols}{\mathbin}
341 \fdsy@DeclareSymbol{\obackslash}{symbols}{\mathbin}
342 \fdsy@DeclareAlias{\obslash}{symbols}{\mathbin}

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```

343 \fdsy@DeclareSymbol{\oplus}{symbols}{\mathbin}
344 \fdsy@DeclareSymbol{\otimes}{symbols}{\mathbin}
345 \fdsy@DeclareSymbol{\odot}{symbols}{\mathbin}
346 \fdsy@DeclareSymbol{\ocirc}{symbols}{\mathbin}
347 \fdsy@DeclareAlias{\circledcirc}{symbols}{\mathbin}
348 \fdsy@DeclareSymbol{\oast}{symbols}{\mathbin}
349 \fdsy@DeclareAlias{\circledast}{symbols}{\mathbin}
350 \fdsy@DeclareSymbol{\odash}{symbols}{\mathbin}
351 \fdsy@DeclareAlias{\circleddash}{symbols}{\mathbin}
352 \fdsy@DeclareSymbol{\oequal}{symbols}{\mathbin}
353 \fdsy@DeclareAlias{\circledequal}{symbols}{\mathbin}
354 \fdsy@DeclareSymbol{\emptyset}{symbols}{\mathord}
355 \fdsy@DeclareAlias{\diameter}{symbols}{\mathord}
356 \fdsy@DeclareAlias{\varnothing}{symbols}{\mathord}
357 \fdsy@DeclareSymbol{\revemptyset}{symbols}{\mathord}
358 \fdsy@DeclareSymbol{\largecircle}{symbols}{\mathord}
359 \fdsy@DeclareAlias{\bigcirc}{symbols}{\mathord}
360 \fdsy@DeclareAlias{\lgwhtcircle}{symbols}{\mathord}
361 \fdsy@DeclareSymbol{\largeblackcircle}{symbols}{\mathord}
362 \fdsy@DeclareAlias{\lgblkcircle}{symbols}{\mathord}
363 \fdsy@DeclareSymbol{\smallsquare}{symbols}{\mathbin}
364 \fdsy@DeclareAlias{\smwhtsquare}{symbols}{\mathbin}
365 \fdsy@DeclareSymbol{\smallblacksquare}{symbols}{\mathbin}
366 \fdsy@DeclareAlias{\smbklsquare}{symbols}{\mathbin}
367 \fdsy@DeclareSymbol{\medsquare}{symbols}{\mathbin}
368 \fdsy@DeclareAlias{\square}{symbols}{\mathbin}
369 \fdsy@DeclareAlias{\Box}{symbols}{\mathbin}
370 \fdsy@DeclareAlias{\mdlgwhtsquare}{symbols}{\mathbin}
371 \fdsy@DeclareAlias{\mdwhtsquare}{symbols}{\mathbin}
372 \fdsy@DeclareSymbol{\medblacksquare}{symbols}{\mathbin}
373 \fdsy@DeclareAlias{\mdlgblklsquare}{symbols}{\mathbin}
374 \fdsy@DeclareAlias{\mdbklsquare}{symbols}{\mathbin}
375 \fdsy@DeclareSymbol{\boxminus}{symbols}{\mathbin}
376 \fdsy@DeclareSymbol{\boxvert}{symbols}{\mathbin}
377 \fdsy@DeclareAlias{\boxbar}{symbols}{\mathbin}
378 \fdsy@DeclareSymbol{\boxslash}{symbols}{\mathbin}
379 \fdsy@DeclareAlias{\boxdiag}{symbols}{\mathbin}
380 \fdsy@DeclareSymbol{\boxbackslash}{symbols}{\mathbin}
381 \fdsy@DeclareAlias{\boxbslash}{symbols}{\mathbin}
382 \fdsy@DeclareSymbol{\boxplus}{symbols}{\mathbin}
383 \fdsy@DeclareSymbol{\boxtimes}{symbols}{\mathbin}
384 \fdsy@DeclareSymbol{\boxdot}{symbols}{\mathbin}
385 \fdsy@DeclareSymbol{\boxbox}{symbols}{\mathbin}
386 \fdsy@DeclareSymbol{\largesquare}{symbols}{\mathord}
387 \fdsy@DeclareAlias{\lgwhtsquare}{symbols}{\mathord}
388 \fdsy@DeclareSymbol{\largeblacksquare}{symbols}{\mathord}
389 \fdsy@DeclareAlias{\lgblklsquare}{symbols}{\mathord}
390 \fdsy@DeclareSymbol{\smalldiamond}{symbols}{\mathbin}
391 \fdsy@DeclareAlias{\diamond}{symbols}{\mathbin}

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392 \fdsy@DeclareAlias{\smwhtdiamond}{symbols}{\mathbin}
393 \fdsy@DeclareSymbol{\smallblackdiamond}{symbols}{\mathbin}
394 \fdsy@DeclareAlias{\blackdiamond}{symbols}{\mathbin}
395 \fdsy@DeclareAlias{\smbldiamond}{symbols}{\mathbin}
396 \fdsy@DeclareSymbol{\meddiamond}{symbols}{\mathbin}
397 \fdsy@DeclareAlias{\Diamond}{symbols}{\mathbin}
398 \fdsy@DeclareAlias{\mdlgwhtdiamond}{symbols}{\mathbin}
399 \fdsy@DeclareAlias{\mdwhtdiamond}{symbols}{\mathbin}
400 \fdsy@DeclareSymbol{\medblackdiamond}{symbols}{\mathbin}
401 \fdsy@DeclareAlias{\mdlgblkdiamond}{symbols}{\mathbin}
402 \fdsy@DeclareAlias{\mdbldiamond}{symbols}{\mathbin}
403 \fdsy@DeclareSymbol{\diamondminus}{symbols}{\mathbin}
404 \fdsy@DeclareSymbol{\diamondvert}{symbols}{\mathbin}
405 \fdsy@DeclareSymbol{\diamondslash}{symbols}{\mathbin}
406 \fdsy@DeclareSymbol{\diamondbackslash}{symbols}{\mathbin}
407 \fdsy@DeclareAlias{\diamondbslash}{symbols}{\mathbin}
408 \fdsy@DeclareSymbol{\diamondplus}{symbols}{\mathbin}
409 \fdsy@DeclareSymbol{\diamondtimes}{symbols}{\mathbin}
410 \fdsy@DeclareSymbol{\diamonddot}{symbols}{\mathbin}
411 \fdsy@DeclareAlias{\diamondcdot}{symbols}{\mathbin}
412 \fdsy@DeclareSymbol{\diamonddiamond}{symbols}{\mathbin}
413 \fdsy@DeclareSymbol{\smalllozenge}{symbols}{\mathord}
414 \fdsy@DeclareAlias{\smwhtlozenge}{symbols}{\mathord}
415 \fdsy@DeclareSymbol{\smallblacklozenge}{symbols}{\mathord}
416 \fdsy@DeclareAlias{\smbldlozenge}{symbols}{\mathord}
417 \fdsy@DeclareSymbol{\medlozenge}{symbols}{\mathord}
418 \fdsy@DeclareAlias{\lozenge}{symbols}{\mathord}
419 \fdsy@DeclareAlias{\mdlgwhtlozenge}{symbols}{\mathord}
420 \fdsy@DeclareAlias{\mdwhtlozenge}{symbols}{\mathord}
421 \fdsy@DeclareSymbol{\medblacklozenge}{symbols}{\mathord}
422 \fdsy@DeclareAlias{\blacklozenge}{symbols}{\mathord}
423 \fdsy@DeclareAlias{\mdlgblklozenge}{symbols}{\mathord}
424 \fdsy@DeclareAlias{\mdbldlozenge}{symbols}{\mathord}
425 \fdsy@DeclareSymbol{\lozengeminus}{symbols}{\mathord}
426 \fdsy@DeclareSymbol{\smallwhitestar}{symbols}{\mathbin}
427 \fdsy@DeclareAlias{\smwhitestar}{symbols}{\mathbin}
428 \fdsy@DeclareSymbol{\smallblackstar}{symbols}{\mathbin}
429 \fdsy@DeclareAlias{\star}{symbols}{\mathbin}
430 \fdsy@DeclareSymbol{\medwhitestar}{symbols}{\mathbin}
431 \fdsy@DeclareSymbol{\medblackstar}{symbols}{\mathbin}
432 \fdsy@DeclareAlias{\medstar}{symbols}{\mathbin}
433 \fdsy@DeclareSymbol{\largewhitestar}{symbols}{\mathord}
434 \fdsy@DeclareSymbol{\largeblackstar}{symbols}{\mathord}
435 \fdsy@DeclareAlias{\bigstar}{symbols}{\mathord}
436 \fdsy@DeclareSymbol{\ast}{symbols}{\mathbin}
437 \fdsy@DeclareSymbol{\infty}{symbols}{\mathord}
438 \fdsy@DeclareSymbol{\propto}{symbols}{\mathrel}
439 \fdsy@DeclareAlias{\varpropto}{symbols}{\mathrel}
440 \fdsy@DeclareSymbol{\backpropto}{symbols}{\mathrel}

```

```

441 \fdsy@DeclareAlias{\propfrom}{symbols}{\mathrel}
442 \fdsy@DeclareSymbol{\crossing}{symbols}{\mathrel}
443 \fdsy@DeclareSymbol{\between}{symbols}{\mathrel}
444 \fdsy@DeclareSymbol{\intercal}{symbols}{\mathbin}
445 \fdsy@DeclareSymbol{\wreath}{symbols}{\mathbin}
446 \fdsy@DeclareAlias{\wr}{symbols}{\mathbin}
447 \fdsy@DeclareSymbol{\angle}{symbols}{\mathord}
448 \fdsy@DeclareSymbol{\revangle}{symbols}{\mathord}
449 \fdsy@DeclareSymbol{\measuredangle}{symbols}{\mathord}
450 \fdsy@DeclareSymbol{\revmeasuredangle}{symbols}{\mathord}
451 \fdsy@DeclareAlias{\measuredangleleft}{symbols}{\mathord}
452 \fdsy@DeclareSymbol{\sphericalangle}{symbols}{\mathord}
453 \fdsy@DeclareSymbol{\sphericalangleup}{symbols}{\mathord}
454 \fdsy@DeclareSymbol{\sphericalangleleft}{symbols}{\mathord}
455 \fdsy@DeclareAlias{\revsphericalangle}{symbols}{\mathord}
456 \fdsy@DeclareAlias{\gtlpar}{symbols}{\mathord}
457 \fdsy@DeclareSymbol{\sphericalangledown}{symbols}{\mathord}
458 \fdsy@DeclareSymbol{\rightangle}{symbols}{\mathord}
459 \fdsy@DeclareSymbol{\measuredrightangle}{symbols}{\mathord}
460 \fdsy@DeclareSymbol{\rightanglesquare}{symbols}{\mathord}
461 \fdsy@DeclareAlias{\rightanglesqr}{symbols}{\mathord}
462 \fdsy@DeclareSymbol{\measuredrightangledot}{symbols}{\mathord}
463 \fdsy@DeclareAlias{\rightangledot}{symbols}{\mathord}
464 \fdsy@DeclareSymbol{\prime}{symbols}{\mathord}
465 \fdsy@DeclareSymbol{\backprime}{symbols}{\mathord}
466 \iffdsy@sfp
467 \fdsy@DeclareSymbol{\varsmallprod}{symbols}{\mathop}
468 \fdsy@DeclareSymbol{\smallprod}{symbols}{\mathop}
469 \fdsy@DeclareSymbol{\varsmallcoprod}{symbols}{\mathop}
470 \fdsy@DeclareAlias{\varamalg}{symbols}{\mathbin}
471 \fdsy@DeclareSymbol{\smallcoprod}{symbols}{\mathop}
472 \fdsy@DeclareAlias{\amalg}{symbols}{\mathbin}
473 \else
474 \fdsy@DeclareSymbol{\smallprod}{symbols}{\mathop}
475 \fdsy@DeclareSymbol{\varsmallprod}{symbols}{\mathop}
476 \fdsy@DeclareSymbol{\smallcoprod}{symbols}{\mathop}
477 \fdsy@DeclareAlias{\amalg}{symbols}{\mathbin}
478 \fdsy@DeclareSymbol{\varsmallcoprod}{symbols}{\mathop}
479 \fdsy@DeclareAlias{\varamalg}{symbols}{\mathbin}
480 \fi
481 \fdsy@DeclareSymbol{\smallint}{symbols}{\mathop}
482 \fdsy@DeclareSymbol{\checkmark}{symbols}{\mathord}
483 \fdsy@DeclareSymbol{\lightning}{symbols}{\mathord}
484 \fdsy@DeclareAlias{\downzigzagarrow}{symbols}{\mathord}
485 \fdsy@DeclareSymbol{\diamondsuit}{symbols}{\mathord}
486 \fdsy@DeclareSymbol{\vardiamondsuit}{symbols}{\mathord}
487 \fdsy@DeclareSymbol{\heartsuit}{symbols}{\mathord}
488 \fdsy@DeclareSymbol{\varheartsuit}{symbols}{\mathord}
489 \fdsy@DeclareSymbol{\spadesuit}{symbols}{\mathord}

```

```

490 \fdsy@DeclareSymbol{\clubsuit}{symbols}{\mathord}
491 \fdsy@DeclareSymbol{\maltese}{symbols}{\mathord}
492 \fdsy@DeclareSymbol{\starofdavid}{symbols}{\mathord}
493 \fdsy@DeclareSymbol{\sector}{symbols}{\mathord}
494 \fdsy@DeclareSymbol{\forall}{symbols}{\mathord}
495 \fdsy@DeclareSymbol{\exists}{symbols}{\mathord}
496 \fdsy@DeclareSymbol{\nexists}{symbols}{\mathord}
497 \fdsy@DeclareSymbol{\Finv}{symbols}{\mathord}
498 \fdsy@DeclareSymbol{\Game}{symbols}{\mathord}
499 \fdsy@DeclareSymbol{\complement}{symbols}{\mathord}
500 \fdsy@DeclareSymbol{\flat}{symbols}{\mathord}
501 \fdsy@DeclareSymbol{\natural}{symbols}{\mathord}
502 \fdsy@DeclareSymbol{\sharp}{symbols}{\mathord}
503 \fdsy@DeclareSymbol{\aleph}{symbols}{\mathord}
504 \fdsy@DeclareSymbol{\beth}{symbols}{\mathord}
505 \fdsy@DeclareSymbol{\gimel}{symbols}{\mathord}
506 \fdsy@DeclareSymbol{\daleth}{symbols}{\mathord}
507 \fdsy@DeclareSymbol{\wp}{symbols}{\mathord}

```

FdSymbolB: relations

```

508 \fdsy@setslot{0}
509 \fdsy@DeclareSymbol{\equal}{relations}{\mathrel}
510 \fdsy@DeclareSymbol{\equiv}{relations}{\mathrel}
511 \fdsy@DeclareSymbol{\sim}{relations}{\mathrel}
512 \fdsy@DeclareSymbol{\backsimeq}{relations}{\mathrel}
513 \fdsy@DeclareSymbol{\approx}{relations}{\mathrel}
514 \fdsy@DeclareSymbol{\triplesim}{relations}{\mathrel}
515 \fdsy@DeclareAlias{\approxdident}{relations}{\mathrel}
516 \fdsy@DeclareSymbol{\simeq}{relations}{\mathrel}
517 \fdsy@DeclareSymbol{\backsimeq}{relations}{\mathrel}
518 \fdsy@DeclareSymbol{\eqsim}{relations}{\mathrel}
519 \fdsy@DeclareSymbol{\cong}{relations}{\mathrel}
520 \fdsy@DeclareSymbol{\backcong}{relations}{\mathrel}
521 \fdsy@DeclareSymbol{\approxeq}{relations}{\mathrel}
522 \fdsy@DeclareSymbol{\bumpeq}{relations}{\mathrel}
523 \fdsy@DeclareSymbol{\bumpeq}{relations}{\mathrel}
524 \fdsy@DeclareSymbol{\Bumpeq}{relations}{\mathrel}
525 \fdsy@DeclareSymbol{\doteq}{relations}{\mathrel}
526 \fdsy@DeclareSymbol{\eqdot}{relations}{\mathrel}
527 \fdsy@DeclareSymbol{\Doteq}{relations}{\mathrel}
528 \fdsy@DeclareAlias{\doteqdot}{relations}{\mathrel}
529 \fdsy@DeclareSymbol{\fallingdotseq}{relations}{\mathrel}
530 \fdsy@DeclareSymbol{\risingdotseq}{relations}{\mathrel}
531 \fdsy@DeclareSymbol{\coloneq}{relations}{\mathrel}
532 \fdsy@DeclareAlias{\coloneqq}{relations}{\mathrel}
533 \fdsy@DeclareSymbol{\eqcolon}{relations}{\mathrel}
534 \fdsy@DeclareAlias{\eqqcolon}{relations}{\mathrel}
535 \fdsy@DeclareSymbol{\smile}{relations}{\mathrel}
536 \fdsy@DeclareAlias{\smallsmile}{relations}{\mathrel}
537 \fdsy@DeclareSymbol{\frown}{relations}{\mathrel}

```

```

538 \fdsy@DeclareAlias{\smallfrown}{relations}{\mathrel}
539 \fdsy@DeclareSymbol{\smilefrown}{relations}{\mathrel}
540 \fdsy@DeclareAlias{\asymp}{relations}{\mathrel}
541 \fdsy@DeclareSymbol{\frownsmile}{relations}{\mathrel}
542 \fdsy@DeclareAlias{\closure}{relations}{\mathrel}
543 \fdsy@DeclareSymbol{\smileeq}{relations}{\mathrel}
544 \fdsy@DeclareSymbol{\frowneq}{relations}{\mathrel}
545 \fdsy@DeclareAlias{\arceq}{relations}{\mathrel}
546 \fdsy@DeclareSymbol{\eqcirc}{relations}{\mathrel}
547 \fdsy@DeclareSymbol{\circeq}{relations}{\mathrel}
548 \fdsy@DeclareSymbol{\wedg eq}{relations}{\mathrel}
549 \fdsy@DeclareAlias{\hateq}{relations}{\mathrel}
550 \fdsy@DeclareSymbol{\veeeq}{relations}{\mathrel}
551 \fdsy@DeclareSymbol{\stareq}{relations}{\mathrel}
552 \fdsy@DeclareSymbol{\triangleeq}{relations}{\mathrel}
553 \fdsy@DeclareAlias{\triangleleq}{relations}{\mathrel}
554 \fdsy@DeclareSymbol{\in}{relations}{\mathrel}
555 \fdsy@DeclareSymbol{\owns}{relations}{\mathrel}
556 \fdsy@DeclareAlias{\ni}{relations}{\mathrel}
557 \fdsy@DeclareSymbol{\less}{relations}{\mathrel}
558 \fdsy@DeclareSymbol{\gtr}{relations}{\mathrel}
559 \fdsy@DeclareSymbol{\leq}{relations}{\mathrel}
560 \fdsy@DeclareAlias{\le}{relations}{\mathrel}
561 \fdsy@DeclareSymbol{\geq}{relations}{\mathrel}
562 \fdsy@DeclareAlias{\ge}{relations}{\mathrel}
563 \fdsy@DeclareSymbol{\leqslant}{relations}{\mathrel}
564 \fdsy@DeclareSymbol{\geqslant}{relations}{\mathrel}
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566 \fdsy@DeclareSymbol{\geqq}{relations}{\mathrel}
567 \fdsy@DeclareSymbol{\lesssim}{relations}{\mathrel}
568 \fdsy@DeclareSymbol{\gtrsim}{relations}{\mathrel}
569 \fdsy@DeclareSymbol{\lessapprox}{relations}{\mathrel}
570 \fdsy@DeclareSymbol{\gtrapprox}{relations}{\mathrel}
571 \fdsy@DeclareSymbol{\lessgtr}{relations}{\mathrel}
572 \fdsy@DeclareSymbol{\gtrless}{relations}{\mathrel}
573 \fdsy@DeclareSymbol{\lesseqgtr}{relations}{\mathrel}
574 \fdsy@DeclareSymbol{\gtreqless}{relations}{\mathrel}
575 \fdsy@DeclareSymbol{\lesseqqgtr}{relations}{\mathrel}
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581 \fdsy@DeclareAlias{\gesl}{relations}{\mathrel}
582 \fdsy@DeclareAlias{\gtreqlessslant}{relations}{\mathrel}
583 \fdsy@DeclareSymbol{\ll}{relations}{\mathrel}
584 \fdsy@DeclareSymbol{\gg}{relations}{\mathrel}
585 \fdsy@DeclareSymbol{\lll}{relations}{\mathrel}
586 \fdsy@DeclareAlias{\lllless}{relations}{\mathrel}

```

```

587 \fdsy@DeclareSymbol{\ggg}{relations}{\mathrel}
588 \fdsy@DeclareAlias{\gggtr}{relations}{\mathrel}
589 \fdsy@DeclareSymbol{\lessclosed}{relations}{\mathrel}
590 \fdsy@DeclareAlias{\lhd}{relations}{\mathbin}
591 \fdsy@DeclareAlias{\vartriangleleft}{relations}{\mathrel}
592 \fdsy@DeclareSymbol{\gtrclosed}{relations}{\mathrel}
593 \fdsy@DeclareAlias{\rhd}{relations}{\mathbin}
594 \fdsy@DeclareAlias{\vartriangleright}{relations}{\mathrel}
595 \fdsy@DeclareSymbol{\leqclosed}{relations}{\mathrel}
596 \fdsy@DeclareAlias{\unlhd}{relations}{\mathbin}
597 \fdsy@DeclareAlias{\trianglelefteq}{relations}{\mathrel}
598 \fdsy@DeclareSymbol{\geqclosed}{relations}{\mathrel}
599 \fdsy@DeclareAlias{\unrhd}{relations}{\mathbin}
600 \fdsy@DeclareAlias{\trianglerighteq}{relations}{\mathrel}
601 \fdsy@DeclareSymbol{\lesscc}{relations}{\mathrel}
602 \fdsy@DeclareAlias{\ltcc}{relations}{\mathrel}
603 \fdsy@DeclareSymbol{\gtrcc}{relations}{\mathrel}
604 \fdsy@DeclareAlias{\gtcc}{relations}{\mathrel}
605 \fdsy@DeclareSymbol{\leqslcc}{relations}{\mathrel}
606 \fdsy@DeclareAlias{\lescc}{relations}{\mathrel}
607 \fdsy@DeclareSymbol{\geqslcc}{relations}{\mathrel}
608 \fdsy@DeclareAlias{\gescc}{relations}{\mathrel}
609 \fdsy@DeclareSymbol{\sqsubset}{relations}{\mathrel}
610 \fdsy@DeclareSymbol{\sqsupset}{relations}{\mathrel}
611 \fdsy@DeclareSymbol{\sqsubseteq}{relations}{\mathrel}
612 \fdsy@DeclareSymbol{\sqsupseteq}{relations}{\mathrel}
613 \fdsy@DeclareSymbol{\sqsubseteq}{relations}{\mathrel}
614 \fdsy@DeclareSymbol{\sqsupseteqeq}{relations}{\mathrel}
615 \fdsy@DeclareSymbol{\Sqsubset}{relations}{\mathrel}
616 \fdsy@DeclareSymbol{\Sqsupset}{relations}{\mathrel}
617 \fdsy@DeclareSymbol{\subset}{relations}{\mathrel}
618 \fdsy@DeclareSymbol{\supset}{relations}{\mathrel}
619 \fdsy@DeclareSymbol{\subseteq}{relations}{\mathrel}
620 \fdsy@DeclareSymbol{\supseteq}{relations}{\mathrel}
621 \fdsy@DeclareSymbol{\subseteqq}{relations}{\mathrel}
622 \fdsy@DeclareSymbol{\supseteqq}{relations}{\mathrel}
623 \fdsy@DeclareSymbol{\Subset}{relations}{\mathrel}
624 \fdsy@DeclareSymbol{\Supset}{relations}{\mathrel}
625 \fdsy@DeclareSymbol{\prec}{relations}{\mathrel}
626 \fdsy@DeclareSymbol{\succ}{relations}{\mathrel}
627 \fdsy@DeclareSymbol{\preceq}{relations}{\mathrel}
628 \fdsy@DeclareSymbol{\succeq}{relations}{\mathrel}
629 \fdsy@DeclareSymbol{\preccurlyeq}{relations}{\mathrel}
630 \fdsy@DeclareSymbol{\succcurlyeq}{relations}{\mathrel}
631 \fdsy@DeclareSymbol{\preceqq}{relations}{\mathrel}
632 \fdsy@DeclareSymbol{\succeqq}{relations}{\mathrel}
633 \fdsy@DeclareSymbol{\precsim}{relations}{\mathrel}
634 \fdsy@DeclareSymbol{\succsim}{relations}{\mathrel}
635 \fdsy@DeclareSymbol{\precapprox}{relations}{\mathrel}

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636 \fdsy@DeclareSymbol{\succapprox}{relations}{\mathrel}
637 \fdsy@DeclareSymbol{\lessdot}{relations}{\mathrel}
638 \fdsy@DeclareSymbol{\gtrdot}{relations}{\mathrel}
639 \fdsy@DeclareSymbol{\leqdot}{relations}{\mathrel}
640 \fdsy@DeclareSymbol{\geqdot}{relations}{\mathrel}
641 \fdsy@DeclareSymbol{\leqslantdot}{relations}{\mathrel}
642 \fdsy@DeclareAlias{\lesdot}{relations}{\mathrel}
643 \fdsy@DeclareSymbol{\geqslantdot}{relations}{\mathrel}
644 \fdsy@DeclareAlias{\gesdot}{relations}{\mathrel}
645 \fdsy@DeclareSymbol{\eqslantless}{relations}{\mathrel}
646 \fdsy@DeclareSymbol{\eqslantgtr}{relations}{\mathrel}
647 \fdsy@DeclareSymbol{\curlyeqprec}{relations}{\mathrel}
648 \fdsy@DeclareSymbol{\curlyeqsucc}{relations}{\mathrel}
649 \fdsy@DeclareSymbol{\nequal}{relations}{\mathrel}
650 \fdsy@DeclareAlias{\neq}{relations}{\mathrel}
651 \fdsy@DeclareAlias{\ne}{relations}{\mathrel}
652 \fdsy@DeclareSymbol{\nequiv}{relations}{\mathrel}
653 \fdsy@DeclareSymbol{\nsim}{relations}{\mathrel}
654 \fdsy@DeclareSymbol{\nbacksimeq}{relations}{\mathrel}
655 \fdsy@DeclareSymbol{\napprox}{relations}{\mathrel}
656 \fdsy@DeclareSymbol{\ntriple sim}{relations}{\mathrel}
657 \fdsy@DeclareAlias{\napproxident}{relations}{\mathrel}
658 \fdsy@DeclareSymbol{\nsimeq}{relations}{\mathrel}
659 \fdsy@DeclareAlias{\nsime}{relations}{\mathrel}
660 \fdsy@DeclareSymbol{\nbacksimeq}{relations}{\mathrel}
661 \fdsy@DeclareSymbol{\neqsim}{relations}{\mathrel}
662 \fdsy@DeclareSymbol{\ncong}{relations}{\mathrel}
663 \fdsy@DeclareSymbol{\nbackcong}{relations}{\mathrel}
664 \fdsy@DeclareSymbol{\napproxeq}{relations}{\mathrel}
665 \fdsy@DeclareSymbol{\nbumpeq}{relations}{\mathrel}
666 \fdsy@DeclareSymbol{\nbumpeq}{relations}{\mathrel}
667 \fdsy@DeclareSymbol{\nbumpeq}{relations}{\mathrel}
668 \fdsy@DeclareSymbol{\ndoteq}{relations}{\mathrel}
669 \fdsy@DeclareSymbol{\neqdot}{relations}{\mathrel}
670 \fdsy@DeclareSymbol{\nDoteq}{relations}{\mathrel}
671 \fdsy@DeclareSymbol{\nfallingdotseq}{relations}{\mathrel}
672 \fdsy@DeclareSymbol{\nrisingdotseq}{relations}{\mathrel}
673 \fdsy@DeclareSymbol{\nsmile}{relations}{\mathrel}
674 \fdsy@DeclareSymbol{\nfrown}{relations}{\mathrel}
675 \fdsy@DeclareSymbol{\nsmilefrown}{relations}{\mathrel}
676 \fdsy@DeclareAlias{\nasymp}{relations}{\mathrel}
677 \fdsy@DeclareSymbol{\nfrownsmile}{relations}{\mathrel}
678 \fdsy@DeclareAlias{\nclosure}{relations}{\mathrel}
679 \fdsy@DeclareSymbol{\nsmileeq}{relations}{\mathrel}
680 \fdsy@DeclareSymbol{\nfrowneq}{relations}{\mathrel}
681 \fdsy@DeclareAlias{\narceq}{relations}{\mathrel}
682 \fdsy@DeclareSymbol{\neqcirc}{relations}{\mathrel}
683 \fdsy@DeclareSymbol{\ncirceq}{relations}{\mathrel}
684 \fdsy@DeclareSymbol{\nwedgeq}{relations}{\mathrel}

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685 \fdsy@DeclareAlias{\nhateq}{relations}{\mathrel}
686 \fdsy@DeclareSymbol{\nveeeq}{relations}{\mathrel}
687 \fdsy@DeclareSymbol{\nstareq}{relations}{\mathrel}
688 \fdsy@DeclareSymbol{\ntriangleeq}{relations}{\mathrel}
689 \fdsy@DeclareSymbol{\nin}{relations}{\mathrel}
690 \fdsy@DeclareAlias{\notin}{relations}{\mathrel}
691 \fdsy@DeclareSymbol{\nowns}{relations}{\mathrel}
692 \fdsy@DeclareAlias{\nni}{relations}{\mathrel}
693 \fdsy@DeclareSymbol{\nless}{relations}{\mathrel}
694 \fdsy@DeclareSymbol{\ngtr}{relations}{\mathrel}
695 \fdsy@DeclareSymbol{\nleq}{relations}{\mathrel}
696 \fdsy@DeclareSymbol{\ngeq}{relations}{\mathrel}
697 \fdsy@DeclareSymbol{\nleqslant}{relations}{\mathrel}
698 \fdsy@DeclareSymbol{\ngeqslant}{relations}{\mathrel}
699 \fdsy@DeclareSymbol{\nleqq}{relations}{\mathrel}
700 \fdsy@DeclareSymbol{\ngeqq}{relations}{\mathrel}
701 \fdsy@DeclareSymbol{\nlesssim}{relations}{\mathrel}
702 \fdsy@DeclareSymbol{\ngtrsim}{relations}{\mathrel}
703 \fdsy@DeclareSymbol{\nlessapprox}{relations}{\mathrel}
704 \fdsy@DeclareSymbol{\ngtrapprox}{relations}{\mathrel}
705 \fdsy@DeclareSymbol{\nlessgtr}{relations}{\mathrel}
706 \fdsy@DeclareSymbol{\ngtrless}{relations}{\mathrel}
707 \fdsy@DeclareSymbol{\nlesseqgtr}{relations}{\mathrel}
708 \fdsy@DeclareSymbol{\ngtreqlless}{relations}{\mathrel}
709 \fdsy@DeclareSymbol{\nlesseqqgtr}{relations}{\mathrel}
710 \fdsy@DeclareSymbol{\ngtreqqless}{relations}{\mathrel}
711 \fdsy@DeclareSymbol{\nlesseqslantgtr}{relations}{\mathrel}
712 \fdsy@DeclareAlias{\nlesg}{relations}{\mathrel}
713 \fdsy@DeclareAlias{\nlesseqgtrslant}{relations}{\mathrel}
714 \fdsy@DeclareSymbol{\ngtreqslantless}{relations}{\mathrel}
715 \fdsy@DeclareAlias{\ngesl}{relations}{\mathrel}
716 \fdsy@DeclareAlias{\ngtreqlessslant}{relations}{\mathrel}
717 \fdsy@DeclareSymbol{\nlll}{relations}{\mathrel}
718 \fdsy@DeclareSymbol{\ngg}{relations}{\mathrel}
719 \fdsy@DeclareSymbol{\nllll}{relations}{\mathrel}
720 \fdsy@DeclareSymbol{\nggg}{relations}{\mathrel}
721 \fdsy@DeclareSymbol{\nlessclosed}{relations}{\mathrel}
722 \fdsy@DeclareAlias{\ntriangleleft}{relations}{\mathrel}
723 \fdsy@DeclareSymbol{\ngtrclosed}{relations}{\mathrel}
724 \fdsy@DeclareAlias{\ntriangleright}{relations}{\mathrel}
725 \fdsy@DeclareSymbol{\nleqclosed}{relations}{\mathrel}
726 \fdsy@DeclareAlias{\ntrianglelefteq}{relations}{\mathrel}
727 \fdsy@DeclareSymbol{\ngeqclosed}{relations}{\mathrel}
728 \fdsy@DeclareAlias{\ntrianglerighteq}{relations}{\mathrel}
729 \fdsy@DeclareSymbol{\nlesscc}{relations}{\mathrel}
730 \fdsy@DeclareAlias{\nltcc}{relations}{\mathrel}
731 \fdsy@DeclareSymbol{\ngtrcc}{relations}{\mathrel}
732 \fdsy@DeclareAlias{\ngtcc}{relations}{\mathrel}
733 \fdsy@DeclareSymbol{\nleqslcc}{relations}{\mathrel}

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734 \fdsy@DeclareAlias{\nlescc}{relations}{\mathrel}
735 \fdsy@DeclareSymbol{\ngeqslcc}{relations}{\mathrel}
736 \fdsy@DeclareAlias{\ngescc}{relations}{\mathrel}
737 \fdsy@DeclareSymbol{\nqssubset}{relations}{\mathrel}
738 \fdsy@DeclareSymbol{\nqsupset}{relations}{\mathrel}
739 \fdsy@DeclareSymbol{\nqssubseteq}{relations}{\mathrel}
740 \fdsy@DeclareSymbol{\nqsupseteq}{relations}{\mathrel}
741 \fdsy@DeclareSymbol{\nqssubseteqq}{relations}{\mathrel}
742 \fdsy@DeclareSymbol{\nqsupseteqq}{relations}{\mathrel}
743 \fdsy@DeclareSymbol{\nSsubset}{relations}{\mathrel}
744 \fdsy@DeclareSymbol{\nSsupset}{relations}{\mathrel}
745 \fdsy@DeclareSymbol{\nsubset}{relations}{\mathrel}
746 \fdsy@DeclareSymbol{\nsubseteq}{relations}{\mathrel}
747 \fdsy@DeclareSymbol{\nsubseteq}{relations}{\mathrel}
748 \fdsy@DeclareSymbol{\nsubseteqq}{relations}{\mathrel}
749 \fdsy@DeclareSymbol{\nsubseteqqq}{relations}{\mathrel}
750 \fdsy@DeclareSymbol{\nsubseteqqqq}{relations}{\mathrel}
751 \fdsy@DeclareSymbol{\nSubset}{relations}{\mathrel}
752 \fdsy@DeclareSymbol{\nSupset}{relations}{\mathrel}
753 \fdsy@DeclareSymbol{\nprec}{relations}{\mathrel}
754 \fdsy@DeclareSymbol{\nsucc}{relations}{\mathrel}
755 \fdsy@DeclareSymbol{\npreceq}{relations}{\mathrel}
756 \fdsy@DeclareSymbol{\nsucceq}{relations}{\mathrel}
757 \fdsy@DeclareSymbol{\npreccurlyeq}{relations}{\mathrel}
758 \fdsy@DeclareSymbol{\nsucccurlyeq}{relations}{\mathrel}
759 \fdsy@DeclareSymbol{\npreceqq}{relations}{\mathrel}
760 \fdsy@DeclareSymbol{\nsucceqq}{relations}{\mathrel}
761 \fdsy@DeclareSymbol{\nprecsim}{relations}{\mathrel}
762 \fdsy@DeclareSymbol{\nsuccsim}{relations}{\mathrel}
763 \fdsy@DeclareSymbol{\nprecapprox}{relations}{\mathrel}
764 \fdsy@DeclareSymbol{\nsuccapprox}{relations}{\mathrel}
765 \fdsy@DeclareSymbol{\nlessdot}{relations}{\mathrel}
766 \fdsy@DeclareSymbol{\ngtrdot}{relations}{\mathrel}
767 \fdsy@DeclareSymbol{\nleqdot}{relations}{\mathrel}
768 \fdsy@DeclareSymbol{\ngeqdot}{relations}{\mathrel}
769 \fdsy@DeclareSymbol{\nleqslantdot}{relations}{\mathrel}
770 \fdsy@DeclareAlias{\nlesdot}{relations}{\mathrel}
771 \fdsy@DeclareSymbol{\ngeqslantdot}{relations}{\mathrel}
772 \fdsy@DeclareAlias{\ngesdot}{relations}{\mathrel}
773 \fdsy@DeclareSymbol{\neqslantless}{relations}{\mathrel}
774 \fdsy@DeclareSymbol{\neqslantgtr}{relations}{\mathrel}
775 \fdsy@DeclareSymbol{\ncurlyeqprec}{relations}{\mathrel}
776 \fdsy@DeclareSymbol{\ncurlyeqsucc}{relations}{\mathrel}
777 \fdsy@DeclareSymbol{\simneqq}{relations}{\mathrel}
778 \fdsy@DeclareSymbol{\backsimneqq}{relations}{\mathrel}
779 \fdsy@DeclareSymbol{\lneq}{relations}{\mathrel}
780 \fdsy@DeclareSymbol{\gneq}{relations}{\mathrel}
781 \fdsy@DeclareSymbol{\lneqq}{relations}{\mathrel}
782 \fdsy@DeclareAlias{\lvertneqq}{relations}{\mathrel}

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783 \fdsy@DeclareSymbol{\gneqq}{relations}{\mathrel}
784 \fdsy@DeclareAlias{\gvertneqq}{relations}{\mathrel}
785 \fdsy@DeclareSymbol{\lnsim}{relations}{\mathrel}
786 \fdsy@DeclareSymbol{\gnsim}{relations}{\mathrel}
787 \fdsy@DeclareSymbol{\lnapprox}{relations}{\mathrel}
788 \fdsy@DeclareSymbol{\gnapprox}{relations}{\mathrel}
789 \fdsy@DeclareSymbol{\sqsubsetneq}{relations}{\mathrel}
790 \fdsy@DeclareSymbol{\sqsupsetneq}{relations}{\mathrel}
791 \fdsy@DeclareSymbol{\sqsubsetneqq}{relations}{\mathrel}
792 \fdsy@DeclareSymbol{\sqsupsetneqq}{relations}{\mathrel}
793 \fdsy@DeclareSymbol{\subsetneq}{relations}{\mathrel}
794 \fdsy@DeclareAlias{\varsubsetneq}{relations}{\mathrel}
795 \fdsy@DeclareSymbol{\supsetneq}{relations}{\mathrel}
796 \fdsy@DeclareAlias{\varsupsetneq}{relations}{\mathrel}
797 \fdsy@DeclareSymbol{\subsetneqq}{relations}{\mathrel}
798 \fdsy@DeclareAlias{\varsubsetneqq}{relations}{\mathrel}
799 \fdsy@DeclareSymbol{\supsetneqq}{relations}{\mathrel}
800 \fdsy@DeclareAlias{\varsupsetneqq}{relations}{\mathrel}
801 \fdsy@DeclareSymbol{\precneq}{relations}{\mathrel}
802 \fdsy@DeclareSymbol{\succneq}{relations}{\mathrel}
803 \fdsy@DeclareSymbol{\precneqq}{relations}{\mathrel}
804 \fdsy@DeclareSymbol{\succneqq}{relations}{\mathrel}
805 \fdsy@DeclareSymbol{\precnsim}{relations}{\mathrel}
806 \fdsy@DeclareSymbol{\succnsim}{relations}{\mathrel}
807 \fdsy@DeclareSymbol{\precnapprox}{relations}{\mathrel}
808 \fdsy@DeclareSymbol{\succnapprox}{relations}{\mathrel}

```

FdSymbolC: arrows and turnstile symbols

```

809 \fdsy@setslot{0}
810 \fdsy@DeclareSymbol{\rightarrow}{arrows}{\mathrel}
811 \fdsy@DeclareAlias{\to}{arrows}{\mathrel}
812 \fdsy@DeclareSymbol{\uparrow}{arrows}{\mathrel}
813 \fdsy@DeclareSymbol{\leftarrow}{arrows}{\mathrel}
814 \fdsy@DeclareAlias{\gets}{arrows}{\mathrel}
815 \fdsy@DeclareSymbol{\downarrow}{arrows}{\mathrel}
816 \fdsy@DeclareSymbol{\nearrow}{arrows}{\mathrel}
817 \fdsy@DeclareSymbol{\nwarrow}{arrows}{\mathrel}
818 \fdsy@DeclareSymbol{\swarrow}{arrows}{\mathrel}
819 \fdsy@DeclareSymbol{\searrow}{arrows}{\mathrel}
820 \fdsy@DeclareSymbol{\Rightarrow}{arrows}{\mathrel}
821 \fdsy@DeclareSymbol{\Uparrow}{arrows}{\mathrel}
822 \fdsy@DeclareSymbol{\Leftarrow}{arrows}{\mathrel}
823 \fdsy@DeclareSymbol{\Downarrow}{arrows}{\mathrel}
824 \fdsy@DeclareSymbol{\Nearrow}{arrows}{\mathrel}
825 \fdsy@DeclareSymbol{\Nwarrow}{arrows}{\mathrel}
826 \fdsy@DeclareSymbol{\Swarrow}{arrows}{\mathrel}
827 \fdsy@DeclareSymbol{\Searrow}{arrows}{\mathrel}
828 \fdsy@DeclareSymbol{\leftrightharpoonup}{arrows}{\mathrel}
829 \fdsy@DeclareSymbol{\updownarrow}{arrows}{\mathrel}
830 \fdsy@DeclareSymbol{\neswarrow}{arrows}{\mathrel}

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831 \fdsy@DeclareSymbol{\nwsearrow}{arrows}{\mathrel}
832 \fdsy@DeclareSymbol{\Leftrightarrow}{arrows}{\mathrel}
833 \fdsy@DeclareSymbol{\Updownarrow}{arrows}{\mathrel}
834 \fdsy@DeclareSymbol{\Neswarrow}{arrows}{\mathrel}
835 \fdsy@DeclareSymbol{\Nwsearrow}{arrows}{\mathrel}
836 \fdsy@DeclareSymbol{\twoheadrightarrow}{arrows}{\mathrel}
837 \fdsy@DeclareSymbol{\twoheaduparrow}{arrows}{\mathrel}
838 \fdsy@DeclareSymbol{\twoheadleftarrow}{arrows}{\mathrel}
839 \fdsy@DeclareSymbol{\twoheaddownarrow}{arrows}{\mathrel}
840 \fdsy@DeclareSymbol{\twoheadnearrow}{arrows}{\mathrel}
841 \fdsy@DeclareSymbol{\twoheadnwarrow}{arrows}{\mathrel}
842 \fdsy@DeclareSymbol{\twoheadswarrow}{arrows}{\mathrel}
843 \fdsy@DeclareSymbol{\twoheadsearrow}{arrows}{\mathrel}
844 \fdsy@DeclareSymbol{\rightarrowtail}{arrows}{\mathrel}
845 \fdsy@DeclareSymbol{\uparrowtail}{arrows}{\mathrel}
846 \fdsy@DeclareSymbol{\leftarrowtail}{arrows}{\mathrel}
847 \fdsy@DeclareSymbol{\downarrowtail}{arrows}{\mathrel}
848 \fdsy@DeclareSymbol{\nearrowtail}{arrows}{\mathrel}
849 \fdsy@DeclareSymbol{\nwarrowtail}{arrows}{\mathrel}
850 \fdsy@DeclareSymbol{\swarrowtail}{arrows}{\mathrel}
851 \fdsy@DeclareSymbol{\searrowtail}{arrows}{\mathrel}
852 \fdsy@DeclareSymbol{\rightrightarrows}{arrows}{\mathrel}
853 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
854 \fdsy@DeclareSymbol{\upmapsto}{arrows}{\mathrel}
855 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
856 \fdsy@DeclareSymbol{\leftmapsto}{arrows}{\mathrel}
857 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
858 \fdsy@DeclareSymbol{\downmapsto}{arrows}{\mathrel}
859 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
860 \fdsy@DeclareSymbol{\Rightmapsto}{arrows}{\mathrel}
861 \fdsy@DeclareAlias{\Mapsto}{arrows}{\mathrel}
862 \fdsy@DeclareSymbol{\Upmapsto}{arrows}{\mathrel}
863 \fdsy@DeclareAlias{\Mapsto}{arrows}{\mathrel}
864 \fdsy@DeclareSymbol{\Leftmapsto}{arrows}{\mathrel}
865 \fdsy@DeclareAlias{\Mapsto}{arrows}{\mathrel}
866 \fdsy@DeclareSymbol{\Downmapsto}{arrows}{\mathrel}
867 \fdsy@DeclareAlias{\Mapsto}{arrows}{\mathrel}
868 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
869 \fdsy@DeclareAlias{\lhookrightarrow}{arrows}{\mathrel}
870 \fdsy@DeclareSymbol{\hookuparrow}{arrows}{\mathrel}
871 \fdsy@DeclareAlias{\lhookuparrow}{arrows}{\mathrel}
872 \fdsy@DeclareSymbol{\varhookleftarrow}{arrows}{\mathrel}
873 \fdsy@DeclareAlias{\lhookleftarrow}{arrows}{\mathrel}
874 \fdsy@DeclareSymbol{\varhookdownarrow}{arrows}{\mathrel}
875 \fdsy@DeclareAlias{\lhookdownarrow}{arrows}{\mathrel}
876 \fdsy@DeclareSymbol{\varhooknearrow}{arrows}{\mathrel}
877 \fdsy@DeclareAlias{\lhooknearrow}{arrows}{\mathrel}
878 \fdsy@DeclareSymbol{\hooknwarrow}{arrows}{\mathrel}
879 \fdsy@DeclareAlias{\hknwarrow}{arrows}{\mathrel}

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```

880 \fdsy@DeclareAlias{\lhooknwarrow}{arrows}{\mathrel}
881 \fdsy@DeclareSymbol{\varhookswarrow}{arrows}{\mathrel}
882 \fdsy@DeclareAlias{\lhookswarrow}{arrows}{\mathrel}
883 \fdsy@DeclareSymbol{\hooksearrow}{arrows}{\mathrel}
884 \fdsy@DeclareAlias{\hksearrow}{arrows}{\mathrel}
885 \fdsy@DeclareAlias{\lhooksearrow}{arrows}{\mathrel}
886 \fdsy@DeclareSymbol{\varhookrightarrow}{arrows}{\mathrel}
887 \fdsy@DeclareAlias{\rhookrightarrow}{arrows}{\mathrel}
888 \fdsy@DeclareSymbol{\varhookuparrow}{arrows}{\mathrel}
889 \fdsy@DeclareAlias{\rhookuparrow}{arrows}{\mathrel}
890 \fdsy@DeclareSymbol{\hookleftarrow}{arrows}{\mathrel}
891 \fdsy@DeclareAlias{\rhookleftarrow}{arrows}{\mathrel}
892 \fdsy@DeclareSymbol{\hookdownarrow}{arrows}{\mathrel}
893 \fdsy@DeclareAlias{\rhookdownarrow}{arrows}{\mathrel}
894 \fdsy@DeclareSymbol{\hooknearrow}{arrows}{\mathrel}
895 \fdsy@DeclareAlias{\hknearrow}{arrows}{\mathrel}
896 \fdsy@DeclareAlias{\rhooknearrow}{arrows}{\mathrel}
897 \fdsy@DeclareSymbol{\varhooknwarrow}{arrows}{\mathrel}
898 \fdsy@DeclareAlias{\rhooknwarrow}{arrows}{\mathrel}
899 \fdsy@DeclareSymbol{\hookswarrow}{arrows}{\mathrel}
900 \fdsy@DeclareAlias{\hkswarrow}{arrows}{\mathrel}
901 \fdsy@DeclareAlias{\rhookswarrow}{arrows}{\mathrel}
902 \fdsy@DeclareSymbol{\varhooksearrow}{arrows}{\mathrel}
903 \fdsy@DeclareAlias{\rhooksearrow}{arrows}{\mathrel}
904 \fdsy@DeclareSymbol{\rightharpoonup}{arrows}{\mathrel}
905 \fdsy@DeclareSymbol{\upharpoonleft}{arrows}{\mathrel}
906 \fdsy@DeclareSymbol{\leftharpoondown}{arrows}{\mathrel}
907 \fdsy@DeclareSymbol{\downharpoonright}{arrows}{\mathrel}
908 \fdsy@DeclareSymbol{\neharpoonnw}{arrows}{\mathrel}
909 \fdsy@DeclareSymbol{\nwharpoonsw}{arrows}{\mathrel}
910 \fdsy@DeclareSymbol{\swharpoonse}{arrows}{\mathrel}
911 \fdsy@DeclareSymbol{\seharpoonne}{arrows}{\mathrel}
912 \fdsy@DeclareSymbol{\rightharpoondown}{arrows}{\mathrel}
913 \fdsy@DeclareSymbol{\upharpoonright}{arrows}{\mathrel}
914 \fdsy@DeclareAlias{\restriction}{arrows}{\mathrel}
915 \fdsy@DeclareSymbol{\leftharpoonup}{arrows}{\mathrel}
916 \fdsy@DeclareSymbol{\downharpoonleft}{arrows}{\mathrel}
917 \fdsy@DeclareSymbol{\neharpoonse}{arrows}{\mathrel}
918 \fdsy@DeclareSymbol{\nwharpoonne}{arrows}{\mathrel}
919 \fdsy@DeclareSymbol{\swharpoonnw}{arrows}{\mathrel}
920 \fdsy@DeclareSymbol{\seharpoonsw}{arrows}{\mathrel}
921 \fdsy@DeclareSymbol{\leftrightharpoonupdown}{arrows}{\mathrel}
922 \fdsy@DeclareSymbol{\updownharpoonleftright}{arrows}{\mathrel}
923 \fdsy@DeclareSymbol{\neswharpoonnwse}{arrows}{\mathrel}
924 \fdsy@DeclareSymbol{\nwseharpoonnesw}{arrows}{\mathrel}
925 \fdsy@DeclareSymbol{\leftrightharpoondownup}{arrows}{\mathrel}
926 \fdsy@DeclareSymbol{\updownharpoonrightleft}{arrows}{\mathrel}
927 \fdsy@DeclareSymbol{\neswharpoonsenw}{arrows}{\mathrel}
928 \fdsy@DeclareSymbol{\nwseharpoonswne}{arrows}{\mathrel}

```

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929 \fdsy@DeclareSymbol{\rightleftharpoons}{arrows}{\mathrel}
930 \fdsy@DeclareSymbol{\updownharpoons}{arrows}{\mathrel}
931 \fdsy@DeclareAlias{\updownharpoonsleftright}{arrows}{\mathrel}
932 \fdsy@DeclareSymbol{\neswharpoons}{arrows}{\mathrel}
933 \fdsy@DeclareSymbol{\senwharpoons}{arrows}{\mathrel}
934 \fdsy@DeclareSymbol{\leftrightharpoons}{arrows}{\mathrel}
935 \fdsy@DeclareSymbol{\downupharpoons}{arrows}{\mathrel}
936 \fdsy@DeclareAlias{\downupharpoonsleftright}{arrows}{\mathrel}
937 \fdsy@DeclareSymbol{\swneharpoons}{arrows}{\mathrel}
938 \fdsy@DeclareSymbol{\nwseharpoons}{arrows}{\mathrel}
939 \fdsy@DeclareSymbol{\rightbkarrow}{arrows}{\mathrel}
940 \fdsy@DeclareAlias{\dasharrow}{arrows}{\mathrel}
941 \fdsy@DeclareAlias{\dashrightarrow}{arrows}{\mathrel}
942 \fdsy@DeclareSymbol{\upbkarrow}{arrows}{\mathrel}
943 \fdsy@DeclareSymbol{\leftbkarrow}{arrows}{\mathrel}
944 \fdsy@DeclareAlias{\dashleftarrow}{arrows}{\mathrel}
945 \fdsy@DeclareSymbol{\downbkarrow}{arrows}{\mathrel}
946 \fdsy@DeclareSymbol{\nebkarrow}{arrows}{\mathrel}
947 \fdsy@DeclareSymbol{\nwbkarrow}{arrows}{\mathrel}
948 \fdsy@DeclareSymbol{\swbkarrow}{arrows}{\mathrel}
949 \fdsy@DeclareSymbol{\sebkarrow}{arrows}{\mathrel}
950 \fdsy@DeclareSymbol{\rightspoon}{arrows}{\mathrel}
951 \fdsy@DeclareAlias{\multimap}{arrows}{\mathrel}
952 \fdsy@DeclareSymbol{\upspoon}{arrows}{\mathrel}
953 \fdsy@DeclareAlias{\circmid}{arrows}{\mathrel}
954 \fdsy@DeclareSymbol{\leftspoon}{arrows}{\mathrel}
955 \fdsy@DeclareAlias{\multimapinv}{arrows}{\mathrel}
956 \fdsy@DeclareSymbol{\downspoon}{arrows}{\mathrel}
957 \fdsy@DeclareAlias{\midcir}{arrows}{\mathrel}
958 \fdsy@DeclareSymbol{\rightblackspoon}{arrows}{\mathrel}
959 \fdsy@DeclareSymbol{\upblackspoon}{arrows}{\mathrel}
960 \fdsy@DeclareSymbol{\leftblackspoon}{arrows}{\mathrel}
961 \fdsy@DeclareSymbol{\downblackspoon}{arrows}{\mathrel}
962 \fdsy@DeclareSymbol{\leftrightblackspoon}{arrows}{\mathrel}
963 \fdsy@DeclareAlias{\dualmap}{arrows}{\mathrel}
964 \fdsy@DeclareSymbol{\leftrightblackspoon}{arrows}{\mathrel}
965 \fdsy@DeclareSymbol{\blackwhitespoon}{arrows}{\mathrel}
966 \fdsy@DeclareAlias{\imageof}{arrows}{\mathrel}
967 \fdsy@DeclareSymbol{\whiteblackspoon}{arrows}{\mathrel}
968 \fdsy@DeclareAlias{\origof}{arrows}{\mathrel}
969 \fdsy@DeclareSymbol{\rightpitchfork}{arrows}{\mathrel}
970 \fdsy@DeclareSymbol{\uppitchfork}{arrows}{\mathrel}
971 \fdsy@DeclareAlias{\pitchfork}{arrows}{\mathrel}
972 \fdsy@DeclareSymbol{\leftpitchfork}{arrows}{\mathrel}
973 \fdsy@DeclareSymbol{\downpitchfork}{arrows}{\mathrel}
974 \fdsy@DeclareSymbol{\rightrightarrow}{arrows}{\mathrel}
975 \fdsy@DeclareSymbol{\upuparrows}{arrows}{\mathrel}
976 \fdsy@DeclareSymbol{\leftleftarrows}{arrows}{\mathrel}
977 \fdsy@DeclareSymbol{\downdownarrows}{arrows}{\mathrel}

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978 \fdsy@DeclareSymbol{\nene arrows}{arrows}{\mathrel}
979 \fdsy@DeclareSymbol{\nwnw arrows}{arrows}{\mathrel}
980 \fdsy@DeclareSymbol{\swsw arrows}{arrows}{\mathrel}
981 \fdsy@DeclareSymbol{\sesearrows}{arrows}{\mathrel}
982 \fdsy@DeclareSymbol{\rightleftarrows}{arrows}{\mathrel}
983 \fdsy@DeclareSymbol{\updownarrows}{arrows}{\mathrel}
984 \fdsy@DeclareSymbol{\nesw arrows}{arrows}{\mathrel}
985 \fdsy@DeclareSymbol{\nwse arrows}{arrows}{\mathrel}
986 \fdsy@DeclareSymbol{\leftrightrightarrows}{arrows}{\mathrel}
987 \fdsy@DeclareSymbol{\downuparrows}{arrows}{\mathrel}
988 \fdsy@DeclareSymbol{\swne arrows}{arrows}{\mathrel}
989 \fdsy@DeclareSymbol{\senw arrows}{arrows}{\mathrel}
990 \fdsy@DeclareSymbol{\rightwvewavearrow}{arrows}{\mathrel}
991 \fdsy@DeclareAlias{\leadsto}{arrows}{\mathrel}
992 \fdsy@DeclareAlias{\rightsquigarrow}{arrows}{\mathrel}
993 \fdsy@DeclareAlias{\rightcurvedarrow}{arrows}{\mathrel}
994 \fdsy@DeclareAlias{\rightlsquigarrow}{arrows}{\mathrel}
995 \fdsy@DeclareSymbol{\varupwvewavearrow}{arrows}{\mathrel}
996 \fdsy@DeclareAlias{\uplsquigarrow}{arrows}{\mathrel}
997 \fdsy@DeclareSymbol{\varleftwvewavearrow}{arrows}{\mathrel}
998 \fdsy@DeclareAlias{\leftlsquigarrow}{arrows}{\mathrel}
999 \fdsy@DeclareSymbol{\downwvewavearrow}{arrows}{\mathrel}
1000 \fdsy@DeclareAlias{\downlsquigarrow}{arrows}{\mathrel}
1001 \fdsy@DeclareSymbol{\varrightwvewavearrow}{arrows}{\mathrel}
1002 \fdsy@DeclareAlias{\rightrsquigarrow}{arrows}{\mathrel}
1003 \fdsy@DeclareSymbol{\upwvewavearrow}{arrows}{\mathrel}
1004 \fdsy@DeclareAlias{\uprsquigarrow}{arrows}{\mathrel}
1005 \fdsy@DeclareSymbol{\leftwvewavearrow}{arrows}{\mathrel}
1006 \fdsy@DeclareAlias{\leftsquigarrow}{arrows}{\mathrel}
1007 \fdsy@DeclareAlias{\leftcurvedarrow}{arrows}{\mathrel}
1008 \fdsy@DeclareAlias{\leftrsquigarrow}{arrows}{\mathrel}
1009 \fdsy@DeclareSymbol{\vardownwvewavearrow}{arrows}{\mathrel}
1010 \fdsy@DeclareAlias{\downrsquigarrow}{arrows}{\mathrel}
1011 \fdsy@DeclareSymbol{\leftrightwvewavearrow}{arrows}{\mathrel}
1012 \fdsy@DeclareAlias{\leftrightsquigarrow}{arrows}{\mathrel}
1013 \fdsy@DeclareSymbol{\updownwvewavearrow}{arrows}{\mathrel}
1014 \fdsy@DeclareAlias{\updownsquigarrow}{arrows}{\mathrel}
1015 \fdsy@DeclareSymbol{\varleftrightwvewavearrow}{arrows}{\mathrel}
1016 \fdsy@DeclareAlias{\rightleftsquigarrow}{arrows}{\mathrel}
1017 \fdsy@DeclareSymbol{\varupdownwvewavearrow}{arrows}{\mathrel}
1018 \fdsy@DeclareAlias{\downupsquigarrow}{arrows}{\mathrel}
1019 \fdsy@DeclareSymbol{\cwoverarcarrow}{arrows}{\mathrel}
1020 \fdsy@DeclareAlias{\curvearrowright}{arrows}{\mathrel}
1021 \fdsy@DeclareAlias{\rightlcurvearrow}{arrows}{\mathrel}
1022 \fdsy@DeclareSymbol{\cwleftarcarrow}{arrows}{\mathrel}
1023 \fdsy@DeclareAlias{\uplcurvearrow}{arrows}{\mathrel}
1024 \fdsy@DeclareSymbol{\cwunderarcarrow}{arrows}{\mathrel}
1025 \fdsy@DeclareAlias{\leftlcurvearrow}{arrows}{\mathrel}
1026 \fdsy@DeclareSymbol{\cwrightarcarrow}{arrows}{\mathrel}

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1027 \fdsy@DeclareAlias{\downlcurvearrow}{arrows}{\mathrel}
1028 \fdsy@DeclareSymbol{\cwnwarcarrow}{arrows}{\mathrel}
1029 \fdsy@DeclareAlias{\rightupcurvedarrow}{arrows}{\mathrel}
1030 \fdsy@DeclareAlias{\nelcurvearrow}{arrows}{\mathrel}
1031 \fdsy@DeclareSymbol{\cwswarcarrow}{arrows}{\mathrel}
1032 \fdsy@DeclareAlias{\upleftcurvedarrow}{arrows}{\mathrel}
1033 \fdsy@DeclareAlias{\nwlcurvearrow}{arrows}{\mathrel}
1034 \fdsy@DeclareSymbol{\cwsarcarrow}{arrows}{\mathrel}
1035 \fdsy@DeclareAlias{\leftdowncurvedarrow}{arrows}{\mathrel}
1036 \fdsy@DeclareAlias{\swlcurvearrow}{arrows}{\mathrel}
1037 \fdsy@DeclareSymbol{\cwnearcarrow}{arrows}{\mathrel}
1038 \fdsy@DeclareAlias{\downrightcurvedarrow}{arrows}{\mathrel}
1039 \fdsy@DeclareAlias{\selcurvearrow}{arrows}{\mathrel}
1040 \fdsy@DeclareSymbol{\acwunderarcarrow}{arrows}{\mathrel}
1041 \fdsy@DeclareAlias{\rightrcurvearrow}{arrows}{\mathrel}
1042 \fdsy@DeclareSymbol{\acwrightarcarrow}{arrows}{\mathrel}
1043 \fdsy@DeclareAlias{\uprcurvearrow}{arrows}{\mathrel}
1044 \fdsy@DeclareSymbol{\acwoverarcarrow}{arrows}{\mathrel}
1045 \fdsy@DeclareAlias{\curvearrowleft}{arrows}{\mathrel}
1046 \fdsy@DeclareAlias{\leftrcurvearrow}{arrows}{\mathrel}
1047 \fdsy@DeclareSymbol{\acwleftarcarrow}{arrows}{\mathrel}
1048 \fdsy@DeclareAlias{\downrcurvearrow}{arrows}{\mathrel}
1049 \fdsy@DeclareSymbol{\acwsearcarrow}{arrows}{\mathrel}
1050 \fdsy@DeclareAlias{\uprightcurvearrow}{arrows}{\mathrel}
1051 \fdsy@DeclareAlias{\nercurvearrow}{arrows}{\mathrel}
1052 \fdsy@DeclareSymbol{\acwnearcarrow}{arrows}{\mathrel}
1053 \fdsy@DeclareAlias{\leftupcurvedarrow}{arrows}{\mathrel}
1054 \fdsy@DeclareAlias{\nwrcurvearrow}{arrows}{\mathrel}
1055 \fdsy@DeclareSymbol{\acwnwarcarrow}{arrows}{\mathrel}
1056 \fdsy@DeclareAlias{\downleftcurvedarrow}{arrows}{\mathrel}
1057 \fdsy@DeclareAlias{\swrcurvearrow}{arrows}{\mathrel}
1058 \fdsy@DeclareSymbol{\acwswarcarrow}{arrows}{\mathrel}
1059 \fdsy@DeclareAlias{\rightdowncurvedarrow}{arrows}{\mathrel}
1060 \fdsy@DeclareAlias{\sercurvearrow}{arrows}{\mathrel}
1061 \fdsy@DeclareSymbol{\bdoverarcarrow}{arrows}{\mathrel}
1062 \fdsy@DeclareAlias{\leftrightcurvearrow}{arrows}{\mathrel}
1063 \fdsy@DeclareSymbol{\bdleftarcarrow}{arrows}{\mathrel}
1064 \fdsy@DeclareAlias{\updowncurvearrow}{arrows}{\mathrel}
1065 \fdsy@DeclareSymbol{\bdunderarcarrow}{arrows}{\mathrel}
1066 \fdsy@DeclareAlias{\rightleftcurvearrow}{arrows}{\mathrel}
1067 \fdsy@DeclareSymbol{\bdrightarcarrow}{arrows}{\mathrel}
1068 \fdsy@DeclareAlias{\downupcurvearrow}{arrows}{\mathrel}
1069 \fdsy@DeclareSymbol{\bdnwarcarrow}{arrows}{\mathrel}
1070 \fdsy@DeclareAlias{\neswcurvearrow}{arrows}{\mathrel}
1071 \fdsy@DeclareSymbol{\bdswarcarrow}{arrows}{\mathrel}
1072 \fdsy@DeclareAlias{\nwsecurvearrow}{arrows}{\mathrel}
1073 \fdsy@DeclareSymbol{\bdsearcarrow}{arrows}{\mathrel}
1074 \fdsy@DeclareAlias{\swnecurvearrow}{arrows}{\mathrel}
1075 \fdsy@DeclareSymbol{\bdnearcarrow}{arrows}{\mathrel}

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1076 \fdsy@DeclareAlias{\senwcurvearrow}{arrows}{\mathrel}
1077 \fdsy@DeclareSymbol{\leftfootline}{arrows}{\mathrel}
1078 \fdsy@DeclareSymbol{\rightfootline}{arrows}{\mathrel}
1079 \fdsy@DeclareSymbol{\acwcirclearrowup}{arrows}{\mathrel}
1080 \fdsy@DeclareSymbol{\acwcirclearrowleft}{arrows}{\mathrel}
1081 \fdsy@DeclareAlias{\circlearrowleft}{arrows}{\mathrel}
1082 \fdsy@DeclareAlias{\acwopencirclearrow}{arrows}{\mathrel}
1083 \fdsy@DeclareSymbol{\acwcirclearrowdown}{arrows}{\mathrel}
1084 \fdsy@DeclareAlias{\acwgapcirclearrow}{arrows}{\mathrel}
1085 \fdsy@DeclareSymbol{\acwcirclearrowright}{arrows}{\mathrel}
1086 \fdsy@DeclareSymbol{\cwcirclearrowdown}{arrows}{\mathrel}
1087 \fdsy@DeclareAlias{\cwgapcirclearrow}{arrows}{\mathrel}
1088 \fdsy@DeclareSymbol{\cwcirclearrowright}{arrows}{\mathrel}
1089 \fdsy@DeclareAlias{\circlearrowright}{arrows}{\mathrel}
1090 \fdsy@DeclareAlias{\cwopencirclearrow}{arrows}{\mathrel}
1091 \fdsy@DeclareSymbol{\cwcirclearrowup}{arrows}{\mathrel}
1092 \fdsy@DeclareSymbol{\cwcirclearrowleft}{arrows}{\mathrel}
1093 \fdsy@DeclareSymbol{\Rrightarrow}{arrows}{\mathrel}
1094 \fdsy@DeclareSymbol{\Uparrow}{arrows}{\mathrel}
1095 \fdsy@DeclareSymbol{\Lleftarrow}{arrows}{\mathrel}
1096 \fdsy@DeclareSymbol{\Ddownarrow}{arrows}{\mathrel}
1097 \fdsy@DeclareSymbol{\longrightarrow}{arrows}{\mathrel}
1098 \fdsy@DeclareSymbol{\longleftarrow}{arrows}{\mathrel}
1099 \fdsy@DeclareSymbol{\Longrightarrow}{arrows}{\mathrel}
1100 \fdsy@DeclareSymbol{\Longleftarrow}{arrows}{\mathrel}
1101 \fdsy@DeclareSymbol{\longleftarrowrightarrow}{arrows}{\mathrel}
1102 \fdsy@DeclareSymbol{\Longleftarrowrightarrow}{arrows}{\mathrel}
1103 \fdsy@DeclareSymbol{\longmapsto}{arrows}{\mathrel}
1104 \fdsy@DeclareSymbol{\longmapsfrom}{arrows}{\mathrel}
1105 \fdsy@DeclareSymbol{\Longmapsto}{arrows}{\mathrel}
1106 \fdsy@DeclareSymbol{\Longmapsfrom}{arrows}{\mathrel}
1107 \fdsy@DeclareSymbol{\longrightwvearrow}{arrows}{\mathrel}
1108 \fdsy@DeclareAlias{\longleadsto}{arrows}{\mathrel}
1109 \fdsy@DeclareAlias{\longrightsquigarrow}{arrows}{\mathrel}
1110 \fdsy@DeclareSymbol{\longleftwvearrow}{arrows}{\mathrel}
1111 \fdsy@DeclareAlias{\longleftsquigarrow}{arrows}{\mathrel}
1112 \fdsy@DeclareSymbol{\longleftfootline}{arrows}{\mathrel}
1113 \fdsy@DeclareAlias{\vlongdash}{arrows}{\mathrel}
1114 \fdsy@DeclareSymbol{\longrightfootline}{arrows}{\mathrel}
1115 \fdsy@DeclareAlias{\vlongdashv}{arrows}{\mathrel}
1116 \fdsy@DeclareSymbol{\Lsh}{arrows}{\mathrel}
1117 \fdsy@DeclareSymbol{\Rsh}{arrows}{\mathrel}
1118 \fdsy@DeclareSymbol{\Ldsh}{arrows}{\mathrel}
1119 \fdsy@DeclareSymbol{\Rdsh}{arrows}{\mathrel}
1120 \fdsy@DeclareSymbol{\looparrowright}{arrows}{\mathrel}
1121 \fdsy@DeclareSymbol{\looparrowleft}{arrows}{\mathrel}
1122 \fdsy@setslot{224}
1123 \fdsy@DeclareSymbol{\rightvdash}{arrows}{\mathrel}
1124 \fdsy@DeclareAlias{\vdash}{arrows}{\mathrel}

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1125 \fdsy@DeclareSymbol{\upvdash}{arrows}{\mathrel}
1126 \fdsy@DeclareAlias{\perp}{arrows}{\mathrel}
1127 \fdsy@DeclareAlias{\bot}{arrows}{\mathord}
1128 \fdsy@DeclareSymbol{\leftvdash}{arrows}{\mathrel}
1129 \fdsy@DeclareAlias{\dashv}{arrows}{\mathrel}
1130 \fdsy@DeclareSymbol{\downvdash}{arrows}{\mathrel}
1131 \fdsy@DeclareAlias{\top}{arrows}{\mathord}
1132 \fdsy@DeclareSymbol{\rightassert}{arrows}{\mathrel}
1133 \fdsy@DeclareAlias{\assert}{arrows}{\mathrel}
1134 \fdsy@DeclareAlias{\shortrighttack}{arrows}{\mathrel}
1135 \fdsy@DeclareSymbol{\upassert}{arrows}{\mathrel}
1136 \fdsy@DeclareAlias{\shortuptack}{arrows}{\mathrel}
1137 \fdsy@DeclareSymbol{\leftassert}{arrows}{\mathrel}
1138 \fdsy@DeclareAlias{\shortlefttack}{arrows}{\mathrel}
1139 \fdsy@DeclareSymbol{\downassert}{arrows}{\mathrel}
1140 \fdsy@DeclareAlias{\shortdowntack}{arrows}{\mathrel}
1141 \fdsy@DeclareSymbol{\rightvDash}{arrows}{\mathrel}
1142 \fdsy@DeclareAlias{\vDash}{arrows}{\mathrel}
1143 \fdsy@DeclareSymbol{\upvDash}{arrows}{\mathrel}
1144 \fdsy@DeclareAlias{\Vbar}{arrows}{\mathrel}
1145 \fdsy@DeclareSymbol{\leftvDash}{arrows}{\mathrel}
1146 \fdsy@DeclareAlias{\Dashv}{arrows}{\mathrel}
1147 \fdsy@DeclareSymbol{\downvDash}{arrows}{\mathrel}
1148 \fdsy@DeclareAlias{\barV}{arrows}{\mathrel}
1149 \fdsy@DeclareSymbol{\rightmodels}{arrows}{\mathrel}
1150 \fdsy@DeclareAlias{\models}{arrows}{\mathrel}
1151 \fdsy@DeclareSymbol{\upmodels}{arrows}{\mathrel}
1152 \fdsy@DeclareSymbol{\leftmodels}{arrows}{\mathrel}
1153 \fdsy@DeclareSymbol{\downmodels}{arrows}{\mathrel}
1154 \fdsy@DeclareSymbol{\rightVdash}{arrows}{\mathrel}
1155 \fdsy@DeclareAlias{\Vdash}{arrows}{\mathrel}
1156 \fdsy@DeclareSymbol{\upVdash}{arrows}{\mathrel}
1157 \fdsy@DeclareSymbol{\leftVdash}{arrows}{\mathrel}
1158 \fdsy@DeclareAlias{\dashV}{arrows}{\mathrel}
1159 \fdsy@DeclareSymbol{\downVdash}{arrows}{\mathrel}
1160 \fdsy@DeclareSymbol{\rightAssert}{arrows}{\mathrel}
1161 \fdsy@DeclareAlias{\Assert}{arrows}{\mathrel}
1162 \fdsy@DeclareSymbol{\upAssert}{arrows}{\mathrel}
1163 \fdsy@DeclareAlias{\vBar}{arrows}{\mathrel}
1164 \fdsy@DeclareSymbol{\leftAssert}{arrows}{\mathrel}
1165 \fdsy@DeclareSymbol{\downAssert}{arrows}{\mathrel}
1166 \fdsy@DeclareAlias{\Barv}{arrows}{\mathrel}
1167 \fdsy@DeclareSymbol{\rightVDash}{arrows}{\mathrel}
1168 \fdsy@DeclareAlias{\VDash}{arrows}{\mathrel}
1169 \fdsy@DeclareSymbol{\upVDash}{arrows}{\mathrel}
1170 \fdsy@DeclareSymbol{\leftVDash}{arrows}{\mathrel}
1171 \fdsy@DeclareAlias{\DashV}{arrows}{\mathrel}
1172 \fdsy@DeclareSymbol{\downVDash}{arrows}{\mathrel}
1173 \fdsy@DeclareSymbol{\Vvdash}{arrows}{\mathrel}

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1174 \fdsy@DeclareSymbol{\dashVv}{arrows}{\mathrel}
1175 \fdsy@DeclareSymbol{\vDdash}{arrows}{\mathrel}
1176 \fdsy@DeclareSymbol{\Ddashv}{arrows}{\mathrel}
1177
1178 \DeclareRobustCommand{\relbar}{\mathrel{\smash-}}
1179 \DeclareRobustCommand{\Relbar}{\mathrel=}
1180 \let\joinrel\undefined
1181 \DeclareRobustCommand\joinrel{\mathrel{\mkern-4mu}}

FdSymbolD: stroked arrows
1182 \fdsy@setslot{0}
1183 \fdsy@DeclareSymbol{\nrightarrow}{narrows}{\mathrel}
1184 \fdsy@DeclareAlias{\nto}{narrows}{\mathrel}
1185 \fdsy@DeclareSymbol{\nuparrow}{narrows}{\mathrel}
1186 \fdsy@DeclareSymbol{\nleftarrow}{narrows}{\mathrel}
1187 \fdsy@DeclareAlias{\ngets}{narrows}{\mathrel}
1188 \fdsy@DeclareSymbol{\ndownarrow}{narrows}{\mathrel}
1189 \fdsy@DeclareSymbol{\nnearrow}{narrows}{\mathrel}
1190 \fdsy@DeclareSymbol{\nnwarrow}{narrows}{\mathrel}
1191 \fdsy@DeclareSymbol{\nswarrow}{narrows}{\mathrel}
1192 \fdsy@DeclareSymbol{\nsearrow}{narrows}{\mathrel}
1193 \fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
1194 \fdsy@DeclareSymbol{\nuparrows}{narrows}{\mathrel}
1195 \fdsy@DeclareSymbol{\nleftarrows}{narrows}{\mathrel}
1196 \fdsy@DeclareSymbol{\ndownarrows}{narrows}{\mathrel}
1197 \fdsy@DeclareSymbol{\nnearrows}{narrows}{\mathrel}
1198 \fdsy@DeclareSymbol{\nnwarrows}{narrows}{\mathrel}
1199 \fdsy@DeclareSymbol{\nswarrows}{narrows}{\mathrel}
1200 \fdsy@DeclareSymbol{\nsearrows}{narrows}{\mathrel}
1201 \fdsy@DeclareSymbol{\nleftrightrightarrow}{narrows}{\mathrel}
1202 \fdsy@DeclareSymbol{\nupdownarrow}{narrows}{\mathrel}
1203 \fdsy@DeclareSymbol{\nneswarrow}{narrows}{\mathrel}
1204 \fdsy@DeclareSymbol{\nnwsearrow}{narrows}{\mathrel}
1205 \fdsy@DeclareSymbol{\nLeftrightarrow}{narrows}{\mathrel}
1206 \fdsy@DeclareSymbol{\nUpdownarrow}{narrows}{\mathrel}
1207 \fdsy@DeclareSymbol{\nNeswarrow}{narrows}{\mathrel}
1208 \fdsy@DeclareSymbol{\nNwsearrow}{narrows}{\mathrel}
1209 \fdsy@DeclareSymbol{\ntwoheadrightarrow}{narrows}{\mathrel}
1210 \fdsy@DeclareSymbol{\ntwoheaduparrow}{narrows}{\mathrel}
1211 \fdsy@DeclareSymbol{\ntwoheadleftarrow}{narrows}{\mathrel}
1212 \fdsy@DeclareSymbol{\ntwoheaddownarrow}{narrows}{\mathrel}
1213 \fdsy@DeclareSymbol{\ntwoheadnearrow}{narrows}{\mathrel}
1214 \fdsy@DeclareSymbol{\ntwoheadnwarrow}{narrows}{\mathrel}
1215 \fdsy@DeclareSymbol{\ntwoheadswarrow}{narrows}{\mathrel}
1216 \fdsy@DeclareSymbol{\ntwoheadsearrow}{narrows}{\mathrel}
1217 \fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
1218 \fdsy@DeclareSymbol{\nuparrowtail}{narrows}{\mathrel}
1219 \fdsy@DeclareSymbol{\nleftarrowtail}{narrows}{\mathrel}
1220 \fdsy@DeclareSymbol{\ndownarrowtail}{narrows}{\mathrel}
1221 \fdsy@DeclareSymbol{\nnearrowtail}{narrows}{\mathrel}

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1222 \fdsy@DeclareSymbol{\nwarrowtail}{narrows}{\mathrel}
1223 \fdsy@DeclareSymbol{\nswarrowtail}{narrows}{\mathrel}
1224 \fdsy@DeclareSymbol{\nsearrowtail}{narrows}{\mathrel}
1225 \fdsy@DeclareSymbol{\nrighmapsto}{narrows}{\mathrel}
1226 \fdsy@DeclareAlias{\nmapsto}{narrows}{\mathrel}
1227 \fdsy@DeclareSymbol{\nupmapsto}{narrows}{\mathrel}
1228 \fdsy@DeclareAlias{\nmapsup}{narrows}{\mathrel}
1229 \fdsy@DeclareSymbol{\nleftmapsto}{narrows}{\mathrel}
1230 \fdsy@DeclareAlias{\nmapsfrom}{narrows}{\mathrel}
1231 \fdsy@DeclareSymbol{\ndownmapsto}{narrows}{\mathrel}
1232 \fdsy@DeclareAlias{\nmapsdown}{narrows}{\mathrel}
1233 \fdsy@DeclareSymbol{\nRightmapsto}{narrows}{\mathrel}
1234 \fdsy@DeclareAlias{\NMapsto}{narrows}{\mathrel}
1235 \fdsy@DeclareSymbol{\nUpmapsto}{narrows}{\mathrel}
1236 \fdsy@DeclareAlias{\NMapsup}{narrows}{\mathrel}
1237 \fdsy@DeclareSymbol{\nLeftmapsto}{narrows}{\mathrel}
1238 \fdsy@DeclareAlias{\NMapsfrom}{narrows}{\mathrel}
1239 \fdsy@DeclareSymbol{\nDownmapsto}{narrows}{\mathrel}
1240 \fdsy@DeclareAlias{\NMapsdown}{narrows}{\mathrel}
1241 \fdsy@DeclareSymbol{\nhookrightarrow}{narrows}{\mathrel}
1242 \fdsy@DeclareSymbol{\nhookuparrow}{narrows}{\mathrel}
1243 \fdsy@DeclareSymbol{\nvarhookleftarrow}{narrows}{\mathrel}
1244 \fdsy@DeclareSymbol{\nvarhookdownarrow}{narrows}{\mathrel}
1245 \fdsy@DeclareSymbol{\nvarhooknearrow}{narrows}{\mathrel}
1246 \fdsy@DeclareSymbol{\nhooknwarrow}{narrows}{\mathrel}
1247 \fdsy@DeclareAlias{\nhknwarrow}{narrows}{\mathrel}
1248 \fdsy@DeclareSymbol{\nvarhookswarrow}{narrows}{\mathrel}
1249 \fdsy@DeclareSymbol{\nhooksearrow}{narrows}{\mathrel}
1250 \fdsy@DeclareAlias{\nhksearrow}{narrows}{\mathrel}
1251 \fdsy@DeclareSymbol{\nvarhookrightarrow}{narrows}{\mathrel}
1252 \fdsy@DeclareSymbol{\nvarhookuparrow}{narrows}{\mathrel}
1253 \fdsy@DeclareSymbol{\nhookleftarrow}{narrows}{\mathrel}
1254 \fdsy@DeclareSymbol{\nhookdownarrow}{narrows}{\mathrel}
1255 \fdsy@DeclareSymbol{\nhooknearrow}{narrows}{\mathrel}
1256 \fdsy@DeclareAlias{\nhknearrow}{narrows}{\mathrel}
1257 \fdsy@DeclareSymbol{\nvarhooknwarrow}{narrows}{\mathrel}
1258 \fdsy@DeclareSymbol{\nhookswarrow}{narrows}{\mathrel}
1259 \fdsy@DeclareAlias{\nhkswarrow}{narrows}{\mathrel}
1260 \fdsy@DeclareSymbol{\nvarhooksearrow}{narrows}{\mathrel}
1261 \fdsy@DeclareSymbol{\nrightharpoonup}{narrows}{\mathrel}
1262 \fdsy@DeclareSymbol{\nupharpoonleft}{narrows}{\mathrel}
1263 \fdsy@DeclareSymbol{\nleftharpoondown}{narrows}{\mathrel}
1264 \fdsy@DeclareSymbol{\ndownharpoonright}{narrows}{\mathrel}
1265 \fdsy@DeclareSymbol{\nneharpoonnw}{narrows}{\mathrel}
1266 \fdsy@DeclareSymbol{\nnwharpoonsw}{narrows}{\mathrel}
1267 \fdsy@DeclareSymbol{\nswharpoone}{narrows}{\mathrel}
1268 \fdsy@DeclareSymbol{\nseharpoone}{narrows}{\mathrel}
1269 \fdsy@DeclareSymbol{\nrightharpoondown}{narrows}{\mathrel}
1270 \fdsy@DeclareSymbol{\nupharpoonright}{narrows}{\mathrel}

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1271 \fdsy@DeclareAlias{\nrestriction}{\narrows}{\mathrel}
1272 \fdsy@DeclareSymbol{\nleftharpoonup}{\narrows}{\mathrel}
1273 \fdsy@DeclareSymbol{\ndownharpoonleft}{\narrows}{\mathrel}
1274 \fdsy@DeclareSymbol{\nneharpoonse}{\narrows}{\mathrel}
1275 \fdsy@DeclareSymbol{\nnwharpoonne}{\narrows}{\mathrel}
1276 \fdsy@DeclareSymbol{\nswharpoonnw}{\narrows}{\mathrel}
1277 \fdsy@DeclareSymbol{\nseharpoonsw}{\narrows}{\mathrel}
1278 \fdsy@DeclareSymbol{\nleftrightharpoonupdown}{\narrows}{\mathrel}
1279 \fdsy@DeclareSymbol{\nupdownharpoonleftright}{\narrows}{\mathrel}
1280 \fdsy@DeclareSymbol{\nneswharpoonnwse}{\narrows}{\mathrel}
1281 \fdsy@DeclareSymbol{\nnwseharpoonsesw}{\narrows}{\mathrel}
1282 \fdsy@DeclareSymbol{\nleftrightharpoondownup}{\narrows}{\mathrel}
1283 \fdsy@DeclareSymbol{\nupdownharpoonrightleft}{\narrows}{\mathrel}
1284 \fdsy@DeclareSymbol{\nneswharpoonsenw}{\narrows}{\mathrel}
1285 \fdsy@DeclareSymbol{\nnwseharpoonswne}{\narrows}{\mathrel}
1286 \fdsy@DeclareSymbol{\nrightharpoons}{\narrows}{\mathrel}
1287 \fdsy@DeclareSymbol{\nupdownharpoons}{\narrows}{\mathrel}
1288 \fdsy@DeclareAlias{\nupdownharpoonsleftright}{\narrows}{\mathrel}
1289 \fdsy@DeclareSymbol{\nneswharpoons}{\narrows}{\mathrel}
1290 \fdsy@DeclareSymbol{\nsenwharpoons}{\narrows}{\mathrel}
1291 \fdsy@DeclareSymbol{\nleftrightharpoons}{\narrows}{\mathrel}
1292 \fdsy@DeclareSymbol{\ndownupharpoons}{\narrows}{\mathrel}
1293 \fdsy@DeclareAlias{\ndownupharpoonsleftright}{\narrows}{\mathrel}
1294 \fdsy@DeclareSymbol{\nswneharpoons}{\narrows}{\mathrel}
1295 \fdsy@DeclareSymbol{\nnwseharpoons}{\narrows}{\mathrel}
1296 \fdsy@DeclareSymbol{\nrightharpoonright}{\narrows}{\mathrel}
1297 \fdsy@DeclareAlias{\ndasharrow}{\narrows}{\mathrel}
1298 \fdsy@DeclareAlias{\ndashrightarrow}{\narrows}{\mathrel}
1299 \fdsy@DeclareSymbol{\nupbkarrow}{\narrows}{\mathrel}
1300 \fdsy@DeclareSymbol{\nleftbkarrow}{\narrows}{\mathrel}
1301 \fdsy@DeclareAlias{\ndashleftarrow}{\narrows}{\mathrel}
1302 \fdsy@DeclareSymbol{\ndownbkarrow}{\narrows}{\mathrel}
1303 \fdsy@DeclareSymbol{\nnebkarrow}{\narrows}{\mathrel}
1304 \fdsy@DeclareSymbol{\nnwbkarrow}{\narrows}{\mathrel}
1305 \fdsy@DeclareSymbol{\nswbkarrow}{\narrows}{\mathrel}
1306 \fdsy@DeclareSymbol{\nsebkarrow}{\narrows}{\mathrel}
1307 \fdsy@DeclareSymbol{\nrightharpoonright}{\narrows}{\mathrel}
1308 \fdsy@DeclareAlias{\nmultimap}{\narrows}{\mathrel}
1309 \fdsy@DeclareSymbol{\nupspoon}{\narrows}{\mathrel}
1310 \fdsy@DeclareAlias{\ncirmid}{\narrows}{\mathrel}
1311 \fdsy@DeclareSymbol{\nleftspoon}{\narrows}{\mathrel}
1312 \fdsy@DeclareAlias{\nmultimapinv}{\narrows}{\mathrel}
1313 \fdsy@DeclareSymbol{\ndownspoon}{\narrows}{\mathrel}
1314 \fdsy@DeclareAlias{\nmidcir}{\narrows}{\mathrel}
1315 \fdsy@DeclareSymbol{\nrightharpoonright}{\narrows}{\mathrel}
1316 \fdsy@DeclareSymbol{\nupblackspoon}{\narrows}{\mathrel}
1317 \fdsy@DeclareSymbol{\nleftblackspoon}{\narrows}{\mathrel}
1318 \fdsy@DeclareSymbol{\ndownblackspoon}{\narrows}{\mathrel}
1319 \fdsy@DeclareSymbol{\nleftrightharpoonright}{\narrows}{\mathrel}

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1320 \fdsy@DeclareAlias{\ndualmap}{narrows}{\mathrel}
1321 \fdsy@DeclareSymbol{\nletrightblackspoon}{narrows}{\mathrel}
1322 \fdsy@DeclareSymbol{\nblackwhitespoon}{narrows}{\mathrel}
1323 \fdsy@DeclareAlias{\nimageof}{narrows}{\mathrel}
1324 \fdsy@DeclareSymbol{\nwhiteblackspoon}{narrows}{\mathrel}
1325 \fdsy@DeclareAlias{\norigof}{narrows}{\mathrel}
1326 \fdsy@DeclareSymbol{\nrightpitchfork}{narrows}{\mathrel}
1327 \fdsy@DeclareSymbol{\nuppitchfork}{narrows}{\mathrel}
1328 \fdsy@DeclareAlias{\npitchfork}{narrows}{\mathrel}
1329 \fdsy@DeclareSymbol{\nleftpitchfork}{narrows}{\mathrel}
1330 \fdsy@DeclareSymbol{\ndownpitchfork}{narrows}{\mathrel}
1331 \fdsy@DeclareSymbol{\nrightrightarrows}{narrows}{\mathrel}
1332 \fdsy@DeclareSymbol{\nupuparrows}{narrows}{\mathrel}
1333 \fdsy@DeclareSymbol{\nleftleftarrows}{narrows}{\mathrel}
1334 \fdsy@DeclareSymbol{\ndowndownarrows}{narrows}{\mathrel}
1335 \fdsy@DeclareSymbol{\nnenearrows}{narrows}{\mathrel}
1336 \fdsy@DeclareSymbol{\nnwnwarrows}{narrows}{\mathrel}
1337 \fdsy@DeclareSymbol{\nswswarrows}{narrows}{\mathrel}
1338 \fdsy@DeclareSymbol{\nseesarrows}{narrows}{\mathrel}
1339 \fdsy@DeclareSymbol{\nrightrightarrows}{narrows}{\mathrel}
1340 \fdsy@DeclareSymbol{\nupdownarrows}{narrows}{\mathrel}
1341 \fdsy@DeclareSymbol{\nneswarrows}{narrows}{\mathrel}
1342 \fdsy@DeclareSymbol{\nnwsearrows}{narrows}{\mathrel}
1343 \fdsy@DeclareSymbol{\nletrightarrows}{narrows}{\mathrel}
1344 \fdsy@DeclareSymbol{\ndownuparrows}{narrows}{\mathrel}
1345 \fdsy@DeclareSymbol{\nswnearrows}{narrows}{\mathrel}
1346 \fdsy@DeclareSymbol{\nsenwarrows}{narrows}{\mathrel}
1347 \fdsy@DeclareSymbol{\nrighthwavearrow}{narrows}{\mathrel}
1348 \fdsy@DeclareAlias{\nleadsto}{narrows}{\mathrel}
1349 \fdsy@DeclareAlias{\nrightrightarrow}{narrows}{\mathrel}
1350 \fdsy@DeclareAlias{\nrightrightcurvedarrow}{arrows}{\mathrel}
1351 \fdsy@DeclareAlias{\nrightrightlsquigarrow}{narrows}{\mathrel}
1352 \fdsy@DeclareSymbol{\nvarupwvearrow}{narrows}{\mathrel}
1353 \fdsy@DeclareAlias{\nuplsquigarrow}{narrows}{\mathrel}
1354 \fdsy@DeclareSymbol{\nvarleftwvearrow}{narrows}{\mathrel}
1355 \fdsy@DeclareAlias{\nleftlsquigarrow}{narrows}{\mathrel}
1356 \fdsy@DeclareSymbol{\ndownwvearrow}{narrows}{\mathrel}
1357 \fdsy@DeclareAlias{\ndownlsquigarrow}{narrows}{\mathrel}
1358 \fdsy@DeclareSymbol{\nvarrightwvearrow}{narrows}{\mathrel}
1359 \fdsy@DeclareAlias{\nrightrightsquigarrow}{narrows}{\mathrel}
1360 \fdsy@DeclareSymbol{\nupwvearrow}{narrows}{\mathrel}
1361 \fdsy@DeclareAlias{\nuprsquigarrow}{narrows}{\mathrel}
1362 \fdsy@DeclareSymbol{\nleftwvearrow}{narrows}{\mathrel}
1363 \fdsy@DeclareAlias{\nleftsquigarrow}{narrows}{\mathrel}
1364 \fdsy@DeclareAlias{\nleftcurvedarrow}{arrows}{\mathrel}
1365 \fdsy@DeclareAlias{\nlefttrsquigarrow}{narrows}{\mathrel}
1366 \fdsy@DeclareSymbol{\nvardownwvearrow}{narrows}{\mathrel}
1367 \fdsy@DeclareAlias{\ndownrsquigarrow}{narrows}{\mathrel}
1368 \fdsy@DeclareSymbol{\nletrightwvearrow}{narrows}{\mathrel}

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1369 \fdsy@DeclareAlias{\nleftrightsquigarrow}{narrows}{\mathrel}
1370 \fdsy@DeclareSymbol{\nupdownwvewarrow}{narrows}{\mathrel}
1371 \fdsy@DeclareAlias{\nupdownsquigarrow}{narrows}{\mathrel}
1372 \fdsy@DeclareSymbol{\nvarleftrighthwewarrow}{narrows}{\mathrel}
1373 \fdsy@DeclareAlias{\nrightrightsquigarrow}{narrows}{\mathrel}
1374 \fdsy@DeclareSymbol{\nvarupdownwvewarrow}{narrows}{\mathrel}
1375 \fdsy@DeclareAlias{\ndownupsquigarrow}{narrows}{\mathrel}
1376 \fdsy@DeclareSymbol{\ncwoverarcarrow}{narrows}{\mathrel}
1377 \fdsy@DeclareAlias{\ncurvearrowright}{narrows}{\mathrel}
1378 \fdsy@DeclareAlias{\nrighlcurvewarrow}{narrows}{\mathrel}
1379 \fdsy@DeclareSymbol{\ncwleftarcarrow}{narrows}{\mathrel}
1380 \fdsy@DeclareAlias{\nuplcurvewarrow}{narrows}{\mathrel}
1381 \fdsy@DeclareSymbol{\ncwunderarcarrow}{narrows}{\mathrel}
1382 \fdsy@DeclareAlias{\nleftlcurvewarrow}{narrows}{\mathrel}
1383 \fdsy@DeclareSymbol{\ncwrightarcarrow}{narrows}{\mathrel}
1384 \fdsy@DeclareAlias{\ndownlcurvewarrow}{narrows}{\mathrel}
1385 \fdsy@DeclareSymbol{\ncwnwarcarrow}{narrows}{\mathrel}
1386 \fdsy@DeclareAlias{\nrighrupcurvedarrow}{narrows}{\mathrel}
1387 \fdsy@DeclareAlias{\nnelcurvewarrow}{narrows}{\mathrel}
1388 \fdsy@DeclareSymbol{\ncwswarcarrow}{narrows}{\mathrel}
1389 \fdsy@DeclareAlias{\nupleftcurvedarrow}{narrows}{\mathrel}
1390 \fdsy@DeclareAlias{\nnwlcurvewarrow}{narrows}{\mathrel}
1391 \fdsy@DeclareSymbol{\ncwsearcarrow}{narrows}{\mathrel}
1392 \fdsy@DeclareAlias{\nleftdowncurvedarrow}{narrows}{\mathrel}
1393 \fdsy@DeclareAlias{\nswlcurvewarrow}{narrows}{\mathrel}
1394 \fdsy@DeclareSymbol{\ncwnearcarrow}{narrows}{\mathrel}
1395 \fdsy@DeclareAlias{\ndownrightcurvedarrow}{narrows}{\mathrel}
1396 \fdsy@DeclareAlias{\nsecurvewarrow}{narrows}{\mathrel}
1397 \fdsy@DeclareSymbol{\nacunderarcarrow}{narrows}{\mathrel}
1398 \fdsy@DeclareAlias{\nrightrcurvewarrow}{narrows}{\mathrel}
1399 \fdsy@DeclareSymbol{\nacwrightarcarrow}{narrows}{\mathrel}
1400 \fdsy@DeclareAlias{\nuprcurvewarrow}{narrows}{\mathrel}
1401 \fdsy@DeclareSymbol{\nacwoverarcarrow}{narrows}{\mathrel}
1402 \fdsy@DeclareAlias{\ncurvearrowleft}{narrows}{\mathrel}
1403 \fdsy@DeclareAlias{\nleftrcurvearrow}{narrows}{\mathrel}
1404 \fdsy@DeclareSymbol{\nacwleftarcarrow}{narrows}{\mathrel}
1405 \fdsy@DeclareAlias{\ndownrcurvearrow}{narrows}{\mathrel}
1406 \fdsy@DeclareSymbol{\nacwsearcarrow}{narrows}{\mathrel}
1407 \fdsy@DeclareAlias{\nuprightcurvedarrow}{narrows}{\mathrel}
1408 \fdsy@DeclareAlias{\nnercurvewarrow}{narrows}{\mathrel}
1409 \fdsy@DeclareSymbol{\nacwnearcarrow}{narrows}{\mathrel}
1410 \fdsy@DeclareAlias{\nleftupcurvedarrow}{narrows}{\mathrel}
1411 \fdsy@DeclareAlias{\nnwrcurvewarrow}{narrows}{\mathrel}
1412 \fdsy@DeclareSymbol{\nacwnwarcarrow}{narrows}{\mathrel}
1413 \fdsy@DeclareAlias{\ndownleftcurvedarrow}{narrows}{\mathrel}
1414 \fdsy@DeclareAlias{\nswrcurvewarrow}{narrows}{\mathrel}
1415 \fdsy@DeclareSymbol{\nacswarcarrow}{narrows}{\mathrel}
1416 \fdsy@DeclareAlias{\nrightdowncurvedarrow}{narrows}{\mathrel}
1417 \fdsy@DeclareAlias{\nsercurvewarrow}{narrows}{\mathrel}

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1418 \fdsy@DeclareSymbol{\nbdoverarcarrow}{narrows}{\mathrel}
1419 \fdsy@DeclareAlias{\nlefttrightarrow}{narrows}{\mathrel}
1420 \fdsy@DeclareSymbol{\nbdleftarccarrow}{narrows}{\mathrel}
1421 \fdsy@DeclareAlias{\nupdowncurvearrow}{narrows}{\mathrel}
1422 \fdsy@DeclareSymbol{\nbdunderarcarrow}{narrows}{\mathrel}
1423 \fdsy@DeclareAlias{\nrightrightcurvearrow}{narrows}{\mathrel}
1424 \fdsy@DeclareSymbol{\nbdrightarccarrow}{narrows}{\mathrel}
1425 \fdsy@DeclareAlias{\ndownupcurvearrow}{narrows}{\mathrel}
1426 \fdsy@DeclareSymbol{\nbdnwarcarrow}{narrows}{\mathrel}
1427 \fdsy@DeclareAlias{\nneswcurvearrow}{narrows}{\mathrel}
1428 \fdsy@DeclareSymbol{\nbdswarcarrow}{narrows}{\mathrel}
1429 \fdsy@DeclareAlias{\nnwsecurvearrow}{narrows}{\mathrel}
1430 \fdsy@DeclareSymbol{\nbdsearcarrow}{narrows}{\mathrel}
1431 \fdsy@DeclareAlias{\nswnecurvearrow}{narrows}{\mathrel}
1432 \fdsy@DeclareSymbol{\nbdnearccarrow}{narrows}{\mathrel}
1433 \fdsy@DeclareAlias{\nsenwcurvearrow}{narrows}{\mathrel}
1434 \fdsy@DeclareSymbol{\nleftfootline}{narrows}{\mathrel}
1435 \fdsy@DeclareSymbol{\nrightfootline}{narrows}{\mathrel}
1436 \fdsy@DeclareSymbol{\nacwcirculararrowup}{narrows}{\mathrel}
1437 \fdsy@DeclareSymbol{\nacwcirculararrowleft}{narrows}{\mathrel}
1438 \fdsy@DeclareAlias{\ncirculararrowleft}{narrows}{\mathrel}
1439 \fdsy@DeclareAlias{\nacwopencirculararrow}{narrows}{\mathrel}
1440 \fdsy@DeclareSymbol{\nacwcirculararrowdown}{narrows}{\mathrel}
1441 \fdsy@DeclareAlias{\nacwgapcirculararrow}{narrows}{\mathrel}
1442 \fdsy@DeclareSymbol{\nacwcirculararrowright}{narrows}{\mathrel}
1443 \fdsy@DeclareSymbol{\ncwcirculararrowdown}{narrows}{\mathrel}
1444 \fdsy@DeclareAlias{\ncwgapcirculararrow}{narrows}{\mathrel}
1445 \fdsy@DeclareSymbol{\ncwcirculararrowright}{narrows}{\mathrel}
1446 \fdsy@DeclareAlias{\ncirculararrowright}{narrows}{\mathrel}
1447 \fdsy@DeclareAlias{\ncwopencirculararrow}{narrows}{\mathrel}
1448 \fdsy@DeclareSymbol{\ncwcirculararrowup}{narrows}{\mathrel}
1449 \fdsy@DeclareSymbol{\ncwcirculararrowleft}{narrows}{\mathrel}
1450 \fdsy@DeclareSymbol{\nRrightarrow}{narrows}{\mathrel}
1451 \fdsy@DeclareSymbol{\nUparrow}{narrows}{\mathrel}
1452 \fdsy@DeclareSymbol{\nLleftarrow}{narrows}{\mathrel}
1453 \fdsy@DeclareSymbol{\nDdownarrow}{narrows}{\mathrel}
1454 \fdsy@DeclareSymbol{\nlongrightarrow}{narrows}{\mathrel}
1455 \fdsy@DeclareSymbol{\nlongleftarrow}{narrows}{\mathrel}
1456 \fdsy@DeclareSymbol{\nLongrightarrow}{narrows}{\mathrel}
1457 \fdsy@DeclareSymbol{\nLongleftarrow}{narrows}{\mathrel}
1458 \fdsy@DeclareSymbol{\nlongleftrightarrow}{narrows}{\mathrel}
1459 \fdsy@DeclareSymbol{\nLongleftrightarrow}{narrows}{\mathrel}
1460 \fdsy@DeclareSymbol{\nlongmapsto}{narrows}{\mathrel}
1461 \fdsy@DeclareSymbol{\nlongmapsfrom}{narrows}{\mathrel}
1462 \fdsy@DeclareSymbol{\nLongmapsto}{narrows}{\mathrel}
1463 \fdsy@DeclareSymbol{\nLongmapsfrom}{narrows}{\mathrel}
1464 \fdsy@DeclareSymbol{\nlongrightarrowwavy}{narrows}{\mathrel}
1465 \fdsy@DeclareAlias{\nlongleadsto}{narrows}{\mathrel}
1466 \fdsy@DeclareAlias{\nlongrightsquigarrow}{narrows}{\mathrel}

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1467 \fdsy@DeclareSymbol{\nlongleftwvearrow}{narrows}{\mathrel}
1468 \fdsy@DeclareAlias{\nlongleftsquigarrow}{narrows}{\mathrel}
1469 \fdsy@DeclareSymbol{\nlongleftfootline}{narrows}{\mathrel}
1470 \fdsy@DeclareAlias{\nvlongdash}{narrows}{\mathrel}
1471 \fdsy@DeclareSymbol{\nlongrightfootline}{narrows}{\mathrel}
1472 \fdsy@DeclareAlias{\nlongdashv}{narrows}{\mathrel}
1473 \fdsy@setslot{224}
1474 \fdsy@DeclareSymbol{\nrightvdash}{narrows}{\mathrel}
1475 \fdsy@DeclareAlias{\nvdash}{narrows}{\mathrel}
1476 \fdsy@DeclareSymbol{\nupvdash}{narrows}{\mathrel}
1477 \fdsy@DeclareAlias{\nperp}{narrows}{\mathrel}
1478 \fdsy@DeclareSymbol{\nleftvdash}{narrows}{\mathrel}
1479 \fdsy@DeclareAlias{\ndashv}{narrows}{\mathrel}
1480 \fdsy@DeclareSymbol{\ndownvdash}{narrows}{\mathrel}
1481 \fdsy@DeclareSymbol{\nrightassert}{narrows}{\mathrel}
1482 \fdsy@DeclareAlias{\nassert}{narrows}{\mathrel}
1483 \fdsy@DeclareAlias{\nshorttrighttack}{narrows}{\mathrel}
1484 \fdsy@DeclareSymbol{\nupassert}{narrows}{\mathrel}
1485 \fdsy@DeclareAlias{\nshortuptack}{narrows}{\mathrel}
1486 \fdsy@DeclareSymbol{\nleftassert}{narrows}{\mathrel}
1487 \fdsy@DeclareAlias{\nshortlefttack}{narrows}{\mathrel}
1488 \fdsy@DeclareSymbol{\ndownassert}{narrows}{\mathrel}
1489 \fdsy@DeclareAlias{\nshortdowntack}{narrows}{\mathrel}
1490 \fdsy@DeclareSymbol{\nrightVdash}{narrows}{\mathrel}
1491 \fdsy@DeclareAlias{\nvDash}{narrows}{\mathrel}
1492 \fdsy@DeclareSymbol{\nupVdash}{narrows}{\mathrel}
1493 \fdsy@DeclareAlias{\nVbar}{narrows}{\mathrel}
1494 \fdsy@DeclareSymbol{\nleftVdash}{narrows}{\mathrel}
1495 \fdsy@DeclareAlias{\nDashv}{narrows}{\mathrel}
1496 \fdsy@DeclareSymbol{\ndownVdash}{narrows}{\mathrel}
1497 \fdsy@DeclareAlias{\nbarV}{narrows}{\mathrel}
1498 \fdsy@DeclareSymbol{\nrightmodels}{narrows}{\mathrel}
1499 \fdsy@DeclareAlias{\nmodels}{narrows}{\mathrel}
1500 \fdsy@DeclareSymbol{\nupmodels}{narrows}{\mathrel}
1501 \fdsy@DeclareSymbol{\nleftmodels}{narrows}{\mathrel}
1502 \fdsy@DeclareSymbol{\ndownmodels}{narrows}{\mathrel}
1503 \fdsy@DeclareSymbol{\nrightVdash}{narrows}{\mathrel}
1504 \fdsy@DeclareAlias{\nVdash}{narrows}{\mathrel}
1505 \fdsy@DeclareSymbol{\nupVdash}{narrows}{\mathrel}
1506 \fdsy@DeclareSymbol{\nleftVdash}{narrows}{\mathrel}
1507 \fdsy@DeclareAlias{\ndashV}{narrows}{\mathrel}
1508 \fdsy@DeclareSymbol{\ndownVdash}{narrows}{\mathrel}
1509 \fdsy@DeclareSymbol{\nrightAssert}{narrows}{\mathrel}
1510 \fdsy@DeclareAlias{\nAssert}{narrows}{\mathrel}
1511 \fdsy@DeclareSymbol{\nupAssert}{narrows}{\mathrel}
1512 \fdsy@DeclareAlias{\nvBar}{narrows}{\mathrel}
1513 \fdsy@DeclareSymbol{\nleftAssert}{narrows}{\mathrel}
1514 \fdsy@DeclareSymbol{\ndownAssert}{narrows}{\mathrel}
1515 \fdsy@DeclareAlias{\nBarv}{narrows}{\mathrel}

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1516 \fdsy@DeclareSymbol{\nrightVDash}{narrows}{\mathrel}
1517 \fdsy@DeclareAlias{\nVDash}{narrows}{\mathrel}
1518 \fdsy@DeclareSymbol{\nupVDash}{narrows}{\mathrel}
1519 \fdsy@DeclareSymbol{\nleftVDash}{narrows}{\mathrel}
1520 \fdsy@DeclareAlias{\nDashV}{narrows}{\mathrel}
1521 \fdsy@DeclareSymbol{\ndownVDash}{narrows}{\mathrel}
1522 \fdsy@DeclareSymbol{\nVvdash}{narrows}{\mathrel}
1523 \fdsy@DeclareSymbol{\ndashVv}{narrows}{\mathrel}
1524 \fdsy@DeclareSymbol{\nvDdash}{narrows}{\mathrel}
1525 \fdsy@DeclareSymbol{\nDdashv}{narrows}{\mathrel}

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FdSymbolE: large operators

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1526 \fdsy@setslot{0}
1527 \fdsy@DeclareSymbol{\tbigplus}{largesymbols}{\mathop}
1528 \fdsy@DeclareSymbol{\dbigplus}{largesymbols}{\mathop}
1529 \fdsy@DeclareSymbol{\tbigtimes}{largesymbols}{\mathop}
1530 \fdsy@DeclareSymbol{\dbigtimes}{largesymbols}{\mathop}
1531 \fdsy@DeclareSymbol{\tbigwedge}{largesymbols}{\mathop}
1532 \fdsy@DeclareSymbol{\dbigwedge}{largesymbols}{\mathop}
1533 \fdsy@DeclareSymbol{\tbigvee}{largesymbols}{\mathop}
1534 \fdsy@DeclareSymbol{\dbigvee}{largesymbols}{\mathop}
1535 \fdsy@DeclareSymbol{\tbigwedgedot}{largesymbols}{\mathop}
1536 \fdsy@DeclareSymbol{\dbigwedgedot}{largesymbols}{\mathop}
1537 \fdsy@DeclareSymbol{\tbigveedot}{largesymbols}{\mathop}
1538 \fdsy@DeclareSymbol{\dbigveedot}{largesymbols}{\mathop}
1539 \fdsy@DeclareSymbol{\tbigdoublewedge}{largesymbols}{\mathop}
1540 \fdsy@DeclareAlias{\tconjqquant}{largesymbols}{\mathop}
1541 \fdsy@DeclareSymbol{\dbigdoublewedge}{largesymbols}{\mathop}
1542 \fdsy@DeclareAlias{\dconjqquant}{largesymbols}{\mathop}
1543 \fdsy@DeclareSymbol{\tbigdoublevee}{largesymbols}{\mathop}
1544 \fdsy@DeclareAlias{\tdisjqquant}{largesymbols}{\mathop}
1545 \fdsy@DeclareSymbol{\dbigdoublevee}{largesymbols}{\mathop}
1546 \fdsy@DeclareAlias{\ddisjqquant}{largesymbols}{\mathop}
1547 \fdsy@DeclareSymbol{\tbigcurlywedge}{largesymbols}{\mathop}
1548 \fdsy@DeclareSymbol{\dbigcurlywedge}{largesymbols}{\mathop}
1549 \fdsy@DeclareSymbol{\tbigcurlyvee}{largesymbols}{\mathop}
1550 \fdsy@DeclareSymbol{\dbigcurlyvee}{largesymbols}{\mathop}
1551 \fdsy@DeclareSymbol{\tbigcap}{largesymbols}{\mathop}
1552 \fdsy@DeclareSymbol{\dbigcap}{largesymbols}{\mathop}
1553 \fdsy@DeclareSymbol{\tbigcup}{largesymbols}{\mathop}
1554 \fdsy@DeclareSymbol{\dbigcup}{largesymbols}{\mathop}
1555 \fdsy@DeclareSymbol{\tbigcapdot}{largesymbols}{\mathop}
1556 \fdsy@DeclareSymbol{\dbigcapdot}{largesymbols}{\mathop}
1557 \fdsy@DeclareSymbol{\tbigcupdot}{largesymbols}{\mathop}
1558 \fdsy@DeclareSymbol{\dbigcupdot}{largesymbols}{\mathop}
1559 \fdsy@DeclareSymbol{\tbigcapplus}{largesymbols}{\mathop}
1560 \fdsy@DeclareSymbol{\dbigcapplus}{largesymbols}{\mathop}
1561 \fdsy@DeclareSymbol{\tbigcupplus}{largesymbols}{\mathop}
1562 \fdsy@DeclareAlias{\tbiguplus}{largesymbols}{\mathop}
1563 \fdsy@DeclareSymbol{\dbigcupplus}{largesymbols}{\mathop}

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1564 \fdsy@DeclareAlias{\dbiguplus}{largesymbols}{\mathop}
1565 \fdsy@DeclareSymbol{\tbigsqcap}{largesymbols}{\mathop}
1566 \fdsy@DeclareSymbol{\dbigsqcap}{largesymbols}{\mathop}
1567 \fdsy@DeclareSymbol{\tbigsqcup}{largesymbols}{\mathop}
1568 \fdsy@DeclareSymbol{\dbigsqcup}{largesymbols}{\mathop}
1569 \fdsy@DeclareSymbol{\tbigsqcapdot}{largesymbols}{\mathop}
1570 \fdsy@DeclareSymbol{\dbigsqcapdot}{largesymbols}{\mathop}
1571 \fdsy@DeclareSymbol{\tbigsqcupdot}{largesymbols}{\mathop}
1572 \fdsy@DeclareSymbol{\dbigsqcupdot}{largesymbols}{\mathop}
1573 \fdsy@DeclareSymbol{\tbigsqcapplus}{largesymbols}{\mathop}
1574 \fdsy@DeclareSymbol{\dbigsqcapplus}{largesymbols}{\mathop}
1575 \fdsy@DeclareSymbol{\tbigsqcupplus}{largesymbols}{\mathop}
1576 \fdsy@DeclareSymbol{\dbigsqcupplus}{largesymbols}{\mathop}
1577 \fdsy@DeclareSymbol{\tbigoplus}{largesymbols}{\mathop}
1578 \fdsy@DeclareSymbol{\dbigoplus}{largesymbols}{\mathop}
1579 \fdsy@DeclareSymbol{\tbigotimes}{largesymbols}{\mathop}
1580 \fdsy@DeclareSymbol{\dbigotimes}{largesymbols}{\mathop}
1581 \fdsy@DeclareSymbol{\tbigodot}{largesymbols}{\mathop}
1582 \fdsy@DeclareSymbol{\dbigodot}{largesymbols}{\mathop}
1583 \fdsy@DeclareSymbol{\tbigoast}{largesymbols}{\mathop}
1584 \fdsy@DeclareSymbol{\dbigoast}{largesymbols}{\mathop}
1585 \iffdsy@sfp
1586 \fdsy@DeclareSymbol{\tvarprod}{largesymbols}{\mathop}
1587 \fdsy@DeclareSymbol{\dvarprod}{largesymbols}{\mathop}
1588 \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
1589 \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
1590 \fdsy@DeclareSymbol{\tvarcoprod}{largesymbols}{\mathop}
1591 \fdsy@DeclareSymbol{\dvarcoprod}{largesymbols}{\mathop}
1592 \fdsy@DeclareSymbol{\tcoprod}{largesymbols}{\mathop}
1593 \fdsy@DeclareSymbol{\dcoprod}{largesymbols}{\mathop}
1594 \fdsy@DeclareSymbol{\tvarsum}{largesymbols}{\mathop}
1595 \fdsy@DeclareSymbol{\dvarsum}{largesymbols}{\mathop}
1596 \fdsy@DeclareSymbol{\tsum}{largesymbols}{\mathop}
1597 \fdsy@DeclareSymbol{\dsum}{largesymbols}{\mathop}
1598 \fdsy@DeclareSymbol{\tvarosum}{largesymbols}{\mathop}
1599 \fdsy@DeclareAlias{\tvarmodtwosum}{largesymbols}{\mathop}
1600 \fdsy@DeclareSymbol{\dvarosum}{largesymbols}{\mathop}
1601 \fdsy@DeclareAlias{\dvarmodtwosum}{largesymbols}{\mathop}
1602 \fdsy@DeclareSymbol{\tosum}{largesymbols}{\mathop}
1603 \fdsy@DeclareAlias{\tmodtwosum}{largesymbols}{\mathop}
1604 \fdsy@DeclareSymbol{\dosum}{largesymbols}{\mathop}
1605 \fdsy@DeclareAlias{\dmodtwosum}{largesymbols}{\mathop}
1606 \else
1607 \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
1608 \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
1609 \fdsy@DeclareSymbol{\tvarprod}{largesymbols}{\mathop}
1610 \fdsy@DeclareSymbol{\dvarprod}{largesymbols}{\mathop}
1611 \fdsy@DeclareSymbol{\tcoprod}{largesymbols}{\mathop}
1612 \fdsy@DeclareSymbol{\dcoprod}{largesymbols}{\mathop}

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1613 \fdsy@DeclareSymbol{\tvarcoprod}{largesymbols}{\mathop}
1614 \fdsy@DeclareSymbol{\dvarcoprod}{largesymbols}{\mathop}
1615 \fdsy@DeclareSymbol{\tsum}{largesymbols}{\mathop}
1616 \fdsy@DeclareSymbol{\dsum}{largesymbols}{\mathop}
1617 \fdsy@DeclareSymbol{\tvarsum}{largesymbols}{\mathop}
1618 \fdsy@DeclareSymbol{\dvarsum}{largesymbols}{\mathop}
1619 \fdsy@DeclareSymbol{\tosum}{largesymbols}{\mathop}
1620 \fdsy@DeclareAlias{\tmodtwosum}{largesymbols}{\mathop}
1621 \fdsy@DeclareSymbol{\dosum}{largesymbols}{\mathop}
1622 \fdsy@DeclareAlias{\dmodtwosum}{largesymbols}{\mathop}
1623 \fdsy@DeclareSymbol{\tvarosum}{largesymbols}{\mathop}
1624 \fdsy@DeclareAlias{\tvarmodtwosum}{largesymbols}{\mathop}
1625 \fdsy@DeclareSymbol{\dvarosum}{largesymbols}{\mathop}
1626 \fdsy@DeclareAlias{\dvarmodtwosum}{largesymbols}{\mathop}
1627 \fi
1628 \fdsy@DeclareSymbol{\tint}{largesymbols}{\mathop}
1629 \fdsy@DeclareSymbol{\dint}{largesymbols}{\mathop}
1630 \fdsy@DeclareSymbol{\tiint}{largesymbols}{\mathop}
1631 \fdsy@DeclareSymbol{\diint}{largesymbols}{\mathop}
1632 \fdsy@DeclareSymbol{\tiiint}{largesymbols}{\mathop}
1633 \fdsy@DeclareSymbol{\diiint}{largesymbols}{\mathop}
1634 \fdsy@DeclareSymbol{\tiiiint}{largesymbols}{\mathop}
1635 \fdsy@DeclareSymbol{\diiiint}{largesymbols}{\mathop}
1636 \fdsy@DeclareSymbol{\tidotsint}{largesymbols}{\mathop}
1637 \fdsy@DeclareAlias{\tdotsint}{largesymbols}{\mathop}
1638 \fdsy@DeclareSymbol{\didotsint}{largesymbols}{\mathop}
1639 \fdsy@DeclareAlias{\ddotsint}{largesymbols}{\mathop}
1640 \fdsy@DeclareSymbol{\tlandupint}{largesymbols}{\mathop}
1641 \fdsy@DeclareAlias{\tintclockwise}{largesymbols}{\mathop}
1642 \fdsy@DeclareSymbol{\dlandupint}{largesymbols}{\mathop}
1643 \fdsy@DeclareAlias{\dintclockwise}{largesymbols}{\mathop}
1644 \fdsy@DeclareSymbol{\tlanddownint}{largesymbols}{\mathop}
1645 \fdsy@DeclareAlias{\tawint}{largesymbols}{\mathop}
1646 \fdsy@DeclareAlias{\tintctrlockwise}{largesymbols}{\mathop}
1647 \fdsy@DeclareSymbol{\dlanddownint}{largesymbols}{\mathop}
1648 \fdsy@DeclareAlias{\dawint}{largesymbols}{\mathop}
1649 \fdsy@DeclareAlias{\dintctrlockwise}{largesymbols}{\mathop}
1650 \fdsy@DeclareSymbol{\tintbar}{largesymbols}{\mathop}
1651 \fdsy@DeclareSymbol{\dintbar}{largesymbols}{\mathop}
1652 \fdsy@DeclareSymbol{\tintBar}{largesymbols}{\mathop}
1653 \fdsy@DeclareSymbol{\dintBar}{largesymbols}{\mathop}
1654 \fdsy@DeclareSymbol{\tfint}{largesymbols}{\mathop}
1655 \fdsy@DeclareSymbol{\dfint}{largesymbols}{\mathop}
1656 \fdsy@DeclareSymbol{\toint}{largesymbols}{\mathop}
1657 \fdsy@DeclareSymbol{\doint}{largesymbols}{\mathop}
1658 \fdsy@DeclareSymbol{\toiint}{largesymbols}{\mathop}
1659 \fdsy@DeclareSymbol{\doiint}{largesymbols}{\mathop}
1660 \fdsy@DeclareSymbol{\toiiint}{largesymbols}{\mathop}
1661 \fdsy@DeclareSymbol{\doiiint}{largesymbols}{\mathop}

```

```

1662 \fdsy@DeclareSymbol{\trcircleleftint}{largesymbols}{\mathop}
1663 \fdsy@DeclareAlias{\tointctrcclockwise}{largesymbols}{\mathop}
1664 \fdsy@DeclareSymbol{\drcircleleftint}{largesymbols}{\mathop}
1665 \fdsy@DeclareAlias{\dointctrcclockwise}{largesymbols}{\mathop}
1666 \fdsy@DeclareSymbol{\tlcircleleftint}{largesymbols}{\mathop}
1667 \fdsy@DeclareAlias{\tvarointcclockwise}{largesymbols}{\mathop}
1668 \fdsy@DeclareSymbol{\dlcircleleftint}{largesymbols}{\mathop}
1669 \fdsy@DeclareAlias{\dvarointcclockwise}{largesymbols}{\mathop}
1670 \fdsy@DeclareSymbol{\trcircleleftint}{largesymbols}{\mathop}
1671 \fdsy@DeclareAlias{\tvarointctrcclockwise}{largesymbols}{\mathop}
1672 \fdsy@DeclareSymbol{\drcircleleftint}{largesymbols}{\mathop}
1673 \fdsy@DeclareAlias{\dvarointctrcclockwise}{largesymbols}{\mathop}
1674 \fdsy@DeclareSymbol{\tlcircleleftint}{largesymbols}{\mathop}
1675 \fdsy@DeclareAlias{\tointcclockwise}{largesymbols}{\mathop}
1676 \fdsy@DeclareSymbol{\dlcircleleftint}{largesymbols}{\mathop}
1677 \fdsy@DeclareAlias{\dointcclockwise}{largesymbols}{\mathop}
1678 \iffdsy@sfp
1679 \fdsy@DeclareSymbol{\tvarsumint}{largesymbols}{\mathop}
1680 \fdsy@DeclareSymbol{\dvarsumint}{largesymbols}{\mathop}
1681 \fdsy@DeclareSymbol{\tsumint}{largesymbols}{\mathop}
1682 \fdsy@DeclareSymbol{\dsumint}{largesymbols}{\mathop}
1683 \else
1684 \fdsy@DeclareSymbol{\tsumint}{largesymbols}{\mathop}
1685 \fdsy@DeclareSymbol{\dsumint}{largesymbols}{\mathop}
1686 \fdsy@DeclareSymbol{\tvarsumint}{largesymbols}{\mathop}
1687 \fdsy@DeclareSymbol{\dvarsumint}{largesymbols}{\mathop}
1688 \fi
1689 \let\intop\tint
1690 \let\ointop\toint
1691
1692 \fdsy@DeclareOperator{\bigplus}{\dbigplus}{\tbigplus}
1693 \fdsy@DeclareOperator{\bigtimes}{\dbigtimes}{\tbigtimes}
1694 \fdsy@DeclareOperator{\bigwedge}{\dbigwedge}{\tbigwedge}
1695 \fdsy@DeclareOperator{\bigvee}{\dbigvee}{\tbigvee}
1696 \fdsy@DeclareOperator{\bigwedgedot}{\dbigwedgedot}{\tbigwedgedot}
1697 \fdsy@DeclareOperator{\bigveedot}{\dbigveedot}{\tbigveedot}
1698 \fdsy@DeclareOperator{\bigdoublewedge}{\dbigdoublewedge}{\tbigdoublewedge}
1699 \fdsy@DeclareOperator{\conjquant}{\dconjquant}{\tconjquant}
1700 \fdsy@DeclareOperator{\bigdoublevee}{\dbigdoublevee}{\tbigdoublevee}
1701 \fdsy@DeclareOperator{\disjquant}{\ddisjquant}{\tdisjquant}
1702 \fdsy@DeclareOperator{\bigcurlywedge}{\dbigcurlywedge}{\tbigcurlywedge}
1703 \fdsy@DeclareOperator{\bigcurlyvee}{\dbigcurlyvee}{\tbigcurlyvee}
1704 \fdsy@DeclareOperator{\bigcurlywedgedot}{\dbigcurlywedgedot}{\tbigcurlywedgedot}
1705 \fdsy@DeclareOperator{\bigcurlyveedot}{\dbigcurlyveedot}{\tbigcurlyveedot}
1706 \fdsy@DeclareOperator{\bigdoublecurlywedge}{\dbigdoublecurlywedge}{\tbigdoublecurlywedge}
1707 \fdsy@DeclareOperator{\bigdoublecurlyvee}{\dbigdoublecurlyvee}{\tbigdoublecurlyvee}
1708 \fdsy@DeclareOperator{\bigcap}{\dbigcap}{\tbigcap}
1709 \fdsy@DeclareOperator{\bigcup}{\dbigcup}{\tbigcup}
1710 \fdsy@DeclareOperator{\bigcapdot}{\dbigcapdot}{\tbigcapdot}

```

1711 \fdsy@DeclareOperator{\bigcupdot}{\dbigcupdot}{\tbigcupdot}
1712 \fdsy@DeclareOperator{\bigcapplus}{\dbigcapplus}{\tbigcapplus}
1713 \fdsy@DeclareOperator{\bigcupplus}{\dbigcupplus}{\tbigcupplus}
1714 \fdsy@DeclareOperator{\biguplus}{\dbiguplus}{\tbiguplus}
1715 \fdsy@DeclareOperator{\bigsqcap}{\dbigsqcap}{\tbigsqcap}
1716 \fdsy@DeclareOperator{\bigsqcup}{\dbigsqcup}{\tbigsqcup}
1717 \fdsy@DeclareOperator{\bigsqcapdot}{\dbigsqcapdot}{\tbigsqcapdot}
1718 \fdsy@DeclareOperator{\bigsqcupdot}{\dbigsqcupdot}{\tbigsqcupdot}
1719 \fdsy@DeclareOperator{\bigsqcapplus}{\dbigsqcapplus}{\tbigsqcapplus}
1720 \fdsy@DeclareOperator{\bigsqcupplus}{\dbigsqcupplus}{\tbigsqcupplus}
1721 \fdsy@DeclareOperator{\bigoplus}{\dbigoplus}{\tbigoplus}
1722 \fdsy@DeclareOperator{\bigotimes}{\dbigotimes}{\tbigotimes}
1723 \fdsy@DeclareOperator{\bigodot}{\dbigodot}{\tbigodot}
1724 \fdsy@DeclareOperator{\bigooast}{\dbigoast}{\tbigooast}
1725 \fdsy@DeclareOperator{\prod}{\dprod}{\tprod}
1726 \fdsy@DeclareOperator{\varprod}{\dvarprod}{\tvarprod}
1727 \fdsy@DeclareOperator{\coprod}{\dcoprod}{\tcoprod}
1728 \fdsy@DeclareOperator{\varcoprod}{\dvarcoprod}{\tvarcoprod}
1729 \fdsy@DeclareOperator{\sum}{\dsum}{\tsum}
1730 \fdsy@DeclareOperator{\varsum}{\dvarsum}{\tvarsum}
1731 \fdsy@DeclareOperator{\osum}{\dosum}{\tosum}
1732 \fdsy@DeclareOperator{\varosum}{\dvarosum}{\tvarosum}
1733 \fdsy@DeclareOperator{\modtwosum}{\dmodtwosum}{\tmodtwosum}
1734 \fdsy@DeclareOperator{\varmodtwosum}{\dvarmodtwosum}{\tvarmodtwosum}
1735 \fdsy@DeclareIntegral{\iint}{\diint}{\tiint}
1736 \fdsy@DeclareIntegral{\iiint}{\diiint}{\tiiiint}
1737 \fdsy@DeclareIntegral{\iiiint}{\diiiint}{\tiiiint}
1738 \fdsy@DeclareIntegral{\idotsint}{\didotsint}{\tidotsint}
1739 \fdsy@DeclareIntegral{\dotsint}{\ddotsint}{\tdotsint}
1740 \fdsy@DeclareIntegral{\landupint}{\dlandupint}{\tlandupint}
1741 \fdsy@DeclareIntegral{\intclockwise}{\dintclockwise}{\tintclockwise}
1742 \fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
1743 \fdsy@DeclareIntegral{\awint}{\dawint}{\tawint}
1744 \fdsy@DeclareIntegral{\intctrlockwise}{\dintctrlockwise}{\tintctrlockwise}
1745 \fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
1746 \fdsy@DeclareIntegral{\intbar}{\dintbar}{\tintbar}
1747 \fdsy@DeclareIntegral{\intBar}{\dintBar}{\tintBar}
1748 \fdsy@DeclareIntegral{\fint}{\dfint}{\tfint}
1749 \fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
1750 \fdsy@DeclareIntegral{\oiiint}{\doiint}{\toiint}
1751 \fdsy@DeclareIntegral{\rcircclerightint}{\drcircclerightint}{\trcircclerightint}
1752 \fdsy@DeclareIntegral{\ointctrlockwise}{\dointctrlockwise}{\tointctrlockwise}
1753 \fdsy@DeclareIntegral{\lcircclerightint}{\dlcircclerightint}{\tlcircclerightint}
1754 \fdsy@DeclareIntegral{\varointclockwise}{\dvarointclockwise}{\tvarointclockwise}
1755 \fdsy@DeclareIntegral{\rcircleleftint}{\drcircleleftint}{\trcircleleftint}
1756 \fdsy@DeclareIntegral{\varointctrlockwise}{\dvarointctrlockwise}{\tvarointctrlockwise}
1757 \fdsy@DeclareIntegral{\lcircleleftint}{\dlcircleleftint}{\tlcircleleftint}
1758 \fdsy@DeclareIntegral{\ointclockwise}{\dointclockwise}{\tointclockwise}
1759 \fdsy@DeclareIntegral{\sumint}{\dsumint}{\tsumint}

```

1760 \fdsy@DeclareIntegral{\varsumint}{\dvarsumint}{\tvarsumint}
1761
1762 \def\intkern@{\mkern-8.5mu\mathchoice{\mkern-1mu}{}}{}{}}
1763 \def\intdots@{\mkern-6mu%
1764   \mathchoice{\@cdotp}%
1765   {{\cdotp}\mkern0.5mu{\cdotp}\mkern0.5mu{\cdotp}}%
1766   {{\cdotp}{\cdotp}{\cdotp}}%
1767   {{\cdotp}{\cdotp}{\cdotp}}%
1768   \mkern-6mu}

```

Math accents.

```

1769 \DeclareMathAccent{\widehat}{\mathord}{largesymbols}{"72}
1770 \DeclareMathAccent{\widetilde}{\mathord}{largesymbols}{"78}
1771 \DeclareMathAccent{\wideparen}{\mathord}{largesymbols}{"7E}
1772 \DeclareMathAccent{\vec}{\mathord}{largesymbols}{"84}
1773 \DeclareMathAccent{\middlebar}{\mathord}{largesymbols}{"85}
1774 \DeclareMathAccent{\middleslash}{\mathord}{largesymbols}{"86}
1775 \DeclareMathAccent{\strokethrough}{\mathord}{largesymbols}{"87}

```

FdSymbolF: delimiters

```

1776 \let\lfloor\undefined
1777 \let\rfloor\undefined
1778 \let\lceil\undefined
1779 \let\rceil\undefined
1780 \let\langle\undefined
1781 \let\rangle\undefined
1782 \iffdsy@largedelims
1783 \fdsy@DeclareOpen({}{delimiters}{"01}
1784 \fdsy@DeclareClose{)}{delimiters}{"07}
1785 \fdsy@DeclareOpen{\lparen}{delimiters}{"01}
1786 \fdsy@DeclareClose{\rparen}{delimiters}{"07}
1787 \fdsy@DeclareOpen{[}{delimiters}{"13}
1788 \fdsy@DeclareClose{]}{delimiters}{"19}
1789 \fdsy@DeclareOpen{\lbrack}{delimiters}{"13}
1790 \fdsy@DeclareClose{\rbrack}{delimiters}{"19}
1791 \fdsy@DeclareOpen{\lfloor}{delimiters}{"1F}
1792 \fdsy@DeclareClose{\rfloor}{delimiters}{"25}
1793 \fdsy@DeclareOpen{\lceil}{delimiters}{"2B}
1794 \fdsy@DeclareClose{\rceil}{delimiters}{"31}
1795 \fdsy@DeclareOpen{\ulcorner}{delimiters}{"37}
1796 \fdsy@DeclareClose{\urcorner}{delimiters}{"3D}
1797 \fdsy@DeclareOpen{\llcorner}{delimiters}{"43}
1798 \fdsy@DeclareClose{\lrcorner}{delimiters}{"49}
1799 \fdsy@DeclareOpen{\ulcorner}{delimiters}{"4F}
1800 \fdsy@DeclareClose{\ulrcorner}{delimiters}{"55}
1801 \fdsy@DeclareOpen{\lsem}{delimiters}{"61}
1802 \fdsy@DeclareClose{\rsem}{delimiters}{"67}
1803 \fdsy@DeclareOpen{\lBrack}{delimiters}{"61}
1804 \fdsy@DeclareClose{\rBrack}{delimiters}{"67}
1805 \fdsy@DeclareOpen{\lbrace}{delimiters}{"73}
1806 \fdsy@DeclareClose{\rbrace}{delimiters}{"79}

```

```

1807 \fdsy@DeclareOpen{<}{delimiters}"86}
1808 \fdsy@DeclareClose{>}{delimiters}"8C}
1809 \fdsy@DeclareOpen{\langle}{delimiters}"86}
1810 \fdsy@DeclareClose{\rangle}{delimiters}"8C}
1811 \fdsy@DeclareOpen{\lAngle}{delimiters}"92}
1812 \fdsy@DeclareClose{\rAngle}{delimiters}"98}
1813 \fdsy@DeclareOpen{\langedot}{delimiters}"9E}
1814 \fdsy@DeclareClose{\rangedot}{delimiters}"A4}
1815 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}"AA}
1816 \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}"AA}
1817 \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}"AA}
1818 \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}"B0}
1819 \expandafter\DeclareMathDelimiter\@backslashchar%
1820   {\mathord}{delimiters}"B0}{delimiters}"B0}
1821 \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}"B0}
1822 \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}"B7}
1823 \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}"B7}
1824 \fdsy@DeclareOpen{\lvert}{delimiters}"B7}
1825 \fdsy@DeclareClose{\rvert}{delimiters}"B7}
1826 \DeclareMathSymbol{\mid}{\mathrel}{delimiters}"B7}
1827 \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}"BA}
1828 \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}"BE}
1829 \fdsy@DeclareOpen{\lVert}{delimiters}"BE}
1830 \fdsy@DeclareClose{\rVert}{delimiters}"BE}
1831 \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}"BE}
1832 \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}"C1}
1833 \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}"C4}
1834 \fdsy@DeclareOpen{\lVvert}{delimiters}"C4}
1835 \fdsy@DeclareClose{\rVvert}{delimiters}"C4}
1836 \else
1837 \fdsy@DeclareOpen{(){delimiters}"00}
1838 \fdsy@DeclareClose{)}{delimiters}"06}
1839 \fdsy@DeclareOpen{\lparen}{delimiters}"00}
1840 \fdsy@DeclareClose{\rparen}{delimiters}"06}
1841 \fdsy@DeclareOpen{[}{delimiters}"12}
1842 \fdsy@DeclareClose{]}{delimiters}"18}
1843 \fdsy@DeclareOpen{\lbrack}{delimiters}"12}
1844 \fdsy@DeclareClose{\rbrack}{delimiters}"18}
1845 \fdsy@DeclareOpen{\lfloor}{delimiters}"1E}
1846 \fdsy@DeclareClose{\rfloor}{delimiters}"24}
1847 \fdsy@DeclareOpen{\lceil}{delimiters}"2A}
1848 \fdsy@DeclareClose{\rceil}{delimiters}"30}
1849 \fdsy@DeclareOpen{\ulcorner}{delimiters}"36}
1850 \fdsy@DeclareClose{\urcorner}{delimiters}"3C}
1851 \fdsy@DeclareOpen{\llcorner}{delimiters}"42}
1852 \fdsy@DeclareClose{\lrcorner}{delimiters}"48}
1853 \fdsy@DeclareOpen{\ulcorner}{delimiters}"4E}
1854 \fdsy@DeclareClose{\ulrcorner}{delimiters}"54}
1855 \fdsy@DeclareOpen{\lsem}{delimiters}"60}

```



```

1856 \fdsy@DeclareClose{\rsem}{delimiters}{"66}
1857 \fdsy@DeclareOpen{\lBrack}{delimiters}{"60}
1858 \fdsy@DeclareClose{\rBrack}{delimiters}{"66}
1859 \fdsy@DeclareOpen{\lbrace}{delimiters}{"72}
1860 \fdsy@DeclareClose{\rbrace}{delimiters}{"78}
1861 \fdsy@DeclareOpen{<}{delimiters}{"85}
1862 \fdsy@DeclareClose{>}{delimiters}{"8B}
1863 \fdsy@DeclareOpen{\langle}{delimiters}{"85}
1864 \fdsy@DeclareClose{\rangle}{delimiters}{"8B}
1865 \fdsy@DeclareOpen{\lAngle}{delimiters}{"91}
1866 \fdsy@DeclareClose{\rAngle}{delimiters}{"97}
1867 \fdsy@DeclareOpen{\langedot}{delimiters}{"9D}
1868 \fdsy@DeclareClose{\rangledot}{delimiters}{"A3}
1869 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}{"A9}
1870 \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}{"A9}
1871 \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}{"A9}
1872 \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}{"AF}
1873 \expandafter\DeclareMathDelimiter\@backslashchar%
1874   {\mathord}{delimiters}{"AF}{delimiters}{"AF}
1875 \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}{"AF}
1876 \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}{"B6}
1877 \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}{"B6}
1878 \fdsy@DeclareOpen{\lvert}{delimiters}{"B6}
1879 \fdsy@DeclareClose{\rvert}{delimiters}{"B6}
1880 \DeclareMathSymbol{\mid}{\mathrel}{delimiters}{"B6}
1881 \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}{"B9}
1882 \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}{"BD}
1883 \fdsy@DeclareOpen{\lVert}{delimiters}{"BD}
1884 \fdsy@DeclareClose{\rVert}{delimiters}{"BD}
1885 \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}{"BD}
1886 \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}{"C0}
1887 \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}{"C3}
1888 \fdsy@DeclareOpen{\lVvert}{delimiters}{"C3}
1889 \fdsy@DeclareClose{\rVvert}{delimiters}{"C3}
1890 \fi
1891 \let\|\lVert
1892 \let\divides\mid
1893 \let\ndivides\nmid
1894 \DeclareMathSymbol{\shortmid}{\mathrel}{delimiters}{"B5}
1895 \DeclareMathSymbol{\nshortmid}{\mathrel}{delimiters}{"B8}
1896 \DeclareMathSymbol{\shortparallel}{\mathrel}{delimiters}{"BC}
1897 \DeclareMathSymbol{\nshortparallel}{\mathrel}{delimiters}{"BF}
1898 \fdsy@DeclareDelimiter{\arrowvert}{\mathord}{delimiters}{"BB}
1899 \fdsy@DeclareDelimiter{\Arrowvert}{\mathord}{delimiters}{"C2}
1900 \fdsy@DeclareClose{\lgroup}{delimiters}{"7E}
1901 \fdsy@DeclareOpen{\rgroup}{delimiters}{"7F}
1902 \fdsy@DeclareClose{\rmoustache}{delimiters}{"80}
1903 \fdsy@DeclareOpen{\lmoustache}{delimiters}{"81}
1904 \fdsy@DeclareDelimiter{\bracevert}{\mathord}{delimiters}{"84}

```

```

1905 \let\uparrow\undefined
1906 \let\downarrow\undefined
1907 \let\updownarrow\undefined
1908 \let\Uparrow\undefined
1909 \let\Downarrow\undefined
1910 \let\Updownarrow\undefined
1911 \DeclareMathDelimiter{\uparrow}{\mathrel}{arrows}{"01}{delimiters}"C6}
1912 \DeclareMathDelimiter{\downarrow}{\mathrel}{arrows}{"03}{delimiters}"C7}
1913 \DeclareMathDelimiter{\updownarrow}{\mathrel}{arrows}{"11}{delimiters}"C8}
1914 \DeclareMathDelimiter{\Uparrow}{\mathrel}{arrows}{"09}{delimiters}"C9}
1915 \DeclareMathDelimiter{\Downarrow}{\mathrel}{arrows}{"0B}{delimiters}"CA}
1916 \DeclareMathDelimiter{\Updownarrow}{\mathrel}{arrows}{"15}{delimiters}"CB}

Horizontal braces.
1917 \DeclareMathSymbol{\bracedl}{\mathord}{delimiters}"CC}
1918 \DeclareMathSymbol{\bracelu}{\mathord}{delimiters}"CD}
1919 \DeclareMathSymbol{\bracerd}{\mathord}{delimiters}"CE}
1920 \DeclareMathSymbol{\braceru}{\mathord}{delimiters}"CF}
1921 \DeclareMathSymbol{\bracemd}{\mathord}{delimiters}"D0}
1922 \DeclareMathSymbol{\bracemu}{\mathord}{delimiters}"D1}
1923 \DeclareMathSymbol{\bracemid}{\mathord}{delimiters}"D2}
1924
1925 \def\bracefill@#1#2#3#4#5{%
1926   $\m@th#5#1\leaders\hbox{#$4$}\hfill#2\leaders\hbox{#$4$}\hfill#3$%
1927 }
1928 \def\downbracefill@{\bracefill@\bracedl\bracemd\bracerd\bracemid}
1929 \def\upbracefill@{\bracefill@\bracelu\bracemu\braceru\bracemid}
1930 \def\downgroupfill@{\bracefill@\bracedl{\bracerd\bracemid}
1931 \def\upgroupfill@{\bracefill@\bracelu{\braceru\bracemid}
1932 \def\linesegmentfill@{\arrowfill@\leftfootline\relbar\rightfootline}
1933 \def\leftharpoonfill@{\arrowfill@\leftharpoondown\relbar\relbar}
1934 \def\rightharpoonfill@{\arrowfill@\relbar\relbar\rightharpoonup}
1935
1936 \DeclareRobustCommand{\overbrace}[1]{%
1937   \mathop{\mathpalette{\overarrow@downbracefill@}{#1}}\limits%
1938 }
1939 \DeclareRobustCommand{\underbrace}[1]{%
1940   \mathop{\mathpalette{\underarrow@upbracefill@}{#1}}\limits%
1941 }
1942 \DeclareRobustCommand{\overgroup}{\mathpalette{\overarrow@downgroupfill@}}
1943 \DeclareRobustCommand{\undergroup}{\mathpalette{\underarrow@upgroupfill@}}
1944 \DeclareRobustCommand{\overlinesegment}{\mathpalette{\overarrow@linesegmentfill@}}
1945 \DeclareRobustCommand{\overleftharpoon}{\mathpalette{\overarrow@leftharpoonfill@}}
1946 \DeclareRobustCommand{\overrightharpoon}{\mathpalette{\overarrow@rightharpoonfill@}}
1947 \DeclareRobustCommand{\underlinesegment}{\mathpalette{\underarrow@linesegmentfill@}}

Radical symbols.
1948 \iffdsy@largedelims
1949 \DeclareMathRadical{\sqrtsign}{delimiters}"D4}{delimiters}"D4}
1950 \DeclareMathSymbol{\surd}{\mathop}{delimiters}"D4}
1951 \else

```

```

1952 \DeclareMathRadical{\sqrtsign}{delimiters}"D3}{delimiters}"D3}
1953 \DeclareMathSymbol{\surd}{\mathop}{delimiters}"D3}
1954 \fi

```

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

```

1955 \def\r@@t#1#2{\setbox\z@\hbox{\$m@th#1\sqrt{#2}$}%
1956 \dimen@ht\z@ \advance\dimen@-\dp\z@
1957 \mkern5mu\raise.6\dimen@\copy\rootbox \mkern-8mu\box\z@}

```

Mathchars.

```

1958 \DeclareMathSymbol{+}{\mathbin}{symbols}"11}
1959 \DeclareMathSymbol{-}{\mathbin}{symbols}"0E}
1960 \DeclareMathSymbol{*}{\mathbin}{symbols}"98}
1961 \DeclareMathSymbol{:}{\mathrel}{symbols}"02}
1962 \DeclareMathSymbol{=}{\mathrel}{relations}"00}
1963 \DeclareMathSymbol{<}{\mathrel}{relations}"24}
1964 \DeclareMathSymbol{>}{\mathrel}{relations}"25}
1965 \iffdsy@largedelims
1966 \DeclareMathSymbol{|}{\mathord}{delimiters}"B7}
1967 \DeclareMathSymbol{(){\mathopen}{delimiters}"01}
1968 \DeclareMathSymbol{)}{\mathclose}{delimiters}"07}
1969 \DeclareMathSymbol{[}{\mathopen}{delimiters}"13}
1970 \DeclareMathSymbol{]}{\mathclose}{delimiters}"19}
1971 \DeclareMathSymbol{/}{\mathord}{delimiters}"AA}
1972 \else
1973 \DeclareMathSymbol{|}{\mathord}{delimiters}"B6}
1974 \DeclareMathSymbol{(){\mathopen}{delimiters}"00}
1975 \DeclareMathSymbol{)}{\mathclose}{delimiters}"06}
1976 \DeclareMathSymbol{[}{\mathopen}{delimiters}"12}
1977 \DeclareMathSymbol{]}{\mathclose}{delimiters}"18}
1978 \DeclareMathSymbol{/}{\mathord}{delimiters}"A9}
1979 \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.

```

1980 \def\c@ncel#1#2{\m@th\ooalign{\$hfil#1/hfil$\crrc$#1#2$}}
1981 \def\not#1{\mathrel{\m@th\mathpalette\c@ncel{#1}}}
1982 \end{style}

```