

# 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 family<sup>1</sup>, but it might also fit well to other contemporary typefaces. To use this font in a L<sup>A</sup>T<sub>E</sub>X document, add the command

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

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<sup>1</sup><http://www.typotheque.com/fonts>

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

### Acknowledgements

The FdSymbol font is derived from MnSymbol<sup>2</sup>, another math symbol font, designed by Achim Blumensath.

## 2 Interferences with other packages

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

## 3 Font selection

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

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

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

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

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

## 4 Symbols

The `fdsymbol` package provides the following symbols.

### 4.1 Ordinary symbols

$\cdots$	<code>\hdots</code>	$\blacklozenge$	<code>\smallblacklozenge,</code> <code>\smbklozenge</code>
$\vdots$	<code>\vdots</code>	$\blacklozenge$	<code>\medlozenge, \lozenge,</code> <code>\mdlgwhtlozenge,</code> <code>\mdwhtlozenge</code>
$\cdotp$	<code>\udots, \adots</code>	$\blacklozenge$	<code>\medblacklozenge,</code> <code>\blacklozenge,</code> <code>\mdlgblklozenge,</code> <code>\mdblklozenge</code>
$\ddots$	<code>\ddots</code>	$\blacklozenge$	<code>\lozengeminus</code>
$\therefore$	<code>\righttherefore</code>	$\star$	<code>\largewhitestar</code>
$\uptherefore$	<code>\uptherefore, \therefore</code>	$\star$	<code>\largeblackstar, \bigstar</code>
$\lefttherefore$	<code>\lefttherefore</code>	$\infty$	<code>\infty</code>
$\downtherefore$	<code>\downtherefore, \because</code>	$\angle$	<code>\angle</code>
$\squaredots$	<code>\squaredots</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\neg$	<code>\neg, \lnot</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\backneg$	<code>\backneg, \invnot, \invneg</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\turnedneg$	<code>\turnedneg, \turnednot</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\turnedbackneg$	<code>\turnedbackneg</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\triangleup$	<code>\largetriangleup</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\triangledown$	<code>\largetriangleup</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\emptyset$	<code>\emptyset, \diameter,</code> <code>\varnothing</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\reemptyset$	<code>\reemptyset</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\bigcirc$	<code>\largecircle, \lgwhtcircle</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\bullet$	<code>\largeblackcircle</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\square$	<code>\largesquare, \lgwhtsquare</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\blacksquare$	<code>\largeblacksquare,</code> <code>\lgblklsquare</code>	$\sphericalangle$	<code>\sphericalangle</code>
$\lozenge$	<code>\smalllozenge, \smwhtlozenge</code>	$\sphericalangle$	<code>\sphericalangle</code>

$\triangle$	<code>\measuredrightangle</code>	$\nexists$	<code>\nexists</code>
$\square$	<code>\rightanglesquare,</code> <code>\rightanglesqr</code>	$\Finv$	<code>\Finv</code>
$\triangle$	<code>\measuredrightangledot,</code> <code>\rightanglemdot</code>	$\complement$	<code>\complement</code>
$\prime$	<code>\prime</code>	$\flat$	<code>\flat</code>
$\backprime$	<code>\backprime</code>	$\natural$	<code>\natural</code>
$\checkmark$	<code>\checkmark</code>	$\sharp$	<code>\sharp</code>
$\lightning$	<code>\lightning, \downzigzagarrow</code>	$\aleph$	<code>\aleph</code>
$\diamond$	<code>\diamondsuit</code>	$\beth$	<code>\beth</code>
$\blacklozenge$	<code>\vardiamondsuit</code>	$\gimel$	<code>\gimel</code>
$\heartsuit$	<code>\heartsuit</code>	$\daleth$	<code>\daleth</code>
$\varheartsuit$	<code>\varheartsuit</code>	$\wp$	<code>\wp</code>
$\spadesuit$	<code>\spadesuit</code>	$\top$	<code>\top</code>
$\clubsuit$	<code>\clubsuit</code>	$\bot$	<code>\bot</code>
$\maltese$	<code>\maltese</code>	$/$	<code>/, \mathslash</code>
$\starofdavid$	<code>\starofdavid</code>	$\backslash$	<code>\backslash</code>
$\sector$	<code>\sector</code>	$ $	<code> , \vert</code>
$\forall$	<code>\forall</code>	$\ $	<code>\Vert</code>
$\exists$	<code>\exists</code>	$\ $	<code>\Vvert</code>

## 4.2 Binary operators

$\cdot$	<code>\cdot</code>	$\dotplus$	<code>\dotplus</code>
$\centerdot$	<code>\centerdot</code>	$\plusdot$	<code>\plusdot</code>
$\hdotdot$	<code>\hdotdot</code>	$\dotimes$	<code>\dotimes</code>
$\vdots$	<code>\vdots</code>	$\timesbar$	<code>\timesbar</code>
$\udotdot$	<code>\udotdot</code>	$\divideontimes$	<code>\divideontimes</code>
$\ddotdotdot$	<code>\ddotdotdot</code>	$\intprod$	<code>\intprod</code>
$-$	<code>-, \minus</code>	$\intprodr$	<code>\intprodr</code>
$\medslash$	<code>\medslash, \smalldivslash</code>	$\leftthreetimes$	<code>\leftthreetimes</code>
$\backslash$	<code>\medbackslash, \smallsetminus</code>	$\rightthreetimes$	<code>\rightthreetimes</code>
$+$	<code>+, \plus</code>	$\dtimes, \btimes$	<code>\dtimes, \btimes</code>
$\times$	<code>\times</code>	$\rtimes$	<code>\rtimes</code>
$\dotminus$	<code>\dotminus</code>	$\utimes, \ttimes$	<code>\utimes, \ttimes</code>
$\minusdot$	<code>\minusdot</code>	$\ltimes$	<code>\ltimes</code>
$\div$	<code>\div</code>	$\lrtimes$	<code>\lrtimes</code>
$\minusfdots$	<code>\minusfdots</code>	$\upbowtie, \hourglass$	<code>\upbowtie, \hourglass</code>
$\minusrdots$	<code>\minusrdots</code>	$\rightY$	<code>\rightY</code>
$\pm$	<code>\pm</code>	$\upY$	<code>\upY</code>
$\mp$	<code>\mp</code>	$\leftY$	<code>\leftY</code>

$\Upsilon$	<code>\downY</code>	$\triangle$	<code>\medtriangleup, \triangle,</code> <code>\vartriangle</code>
$\wedge$	<code>\wedge, \land</code>	$\triangleleft$	<code>\medtriangleleft,</code> <code>\triangleleft</code>
$\vee$	<code>\vee, \lor</code>	$\nabla$	<code>\medtriangledown,</code> <code>\triangledown</code>
$\wedge$	<code>\wedgedot</code>	$\blacktriangleright$	<code>\medblacktriangleright,</code> <code>\blacktriangleright</code>
$\vee$	<code>\veedot</code>	$\blacktriangleup$	<code>\medblacktriangleup,</code> <code>\blacktriangle</code>
$\M$	<code>\doublewedge, \wedgonwedge</code>	$\blacktriangleleft$	<code>\medblacktriangleleft,</code> <code>\blacktriangleleft</code>
$\W$	<code>\doublevee, \veeonwee</code>	$\blacktriangledown$	<code>\medblacktriangledown,</code> <code>\blacktriangledown</code>
$\curlywedge$	<code>\curlywedge</code>	$\bigtriangleup$	<code>\bigtriangleup</code>
$\curlyvee$	<code>\curlyvee</code>	$\bigtriangledown$	<code>\bigtriangledown</code>
$\bar{\wedge}$	<code>\barwedge</code>	$\circ$	<code>\smallcircle, \circ,</code> <code>\smwhtcircle</code>
$\bar{\vee}$	<code>\veebar</code>	$\bullet$	<code>\smallblackcircle, \bullet,</code> <code>\smbkcircle</code>
$\bar{\bar{\wedge}}$	<code>\doublebarwedge</code>	$\bigcirc$	<code>\medcircle, \mdlgwhtcircle,</code> <code>\mdwhtcircle</code>
$\bar{\bar{\vee}}$	<code>\veedoublebar</code>	$\bigodot$	<code>\medblackcircle,</code> <code>\mdlgblkcircle, \mdblkcicle</code>
$\cup$	<code>\cup</code>	$\ominus$	<code>\ominus</code>
$\cap$	<code>\cap</code>	$\oslash$	<code>\oslash</code>
$\cup$	<code>\doublecup, \Cup</code>	$\obslash$	<code>\obackslash, \obslash</code>
$\cap$	<code>\doublecap, \Cap</code>	$\oplus$	<code>\oplus</code>
$\cup$	<code>\cupdot</code>	$\otimes$	<code>\otimes</code>
$\cap$	<code>\capdot</code>	$\odot$	<code>\odot</code>
$\cup$	<code>\cupplus, \uplus</code>	$\ocirc$	<code>\ocirc, \circledcirc</code>
$\cap$	<code>\capplus</code>	$\odash$	<code>\odash, \circleddash</code>
$\sqcup$	<code>\sqcup</code>	$\oequal$	<code>\oequal, \circledequal</code>
$\sqcap$	<code>\sqcap</code>	$\bigcirc$	<code>\bigcirc</code>
$\sqcup$	<code>\doublesqcup, \Sqcup</code>	$\square$	<code>\smallsquare, \smwhtsquare</code>
$\sqcap$	<code>\doublesqcap, \Sqcap</code>	$\blacksquare$	<code>\smallblacksquare,</code> <code>\smbklsquare</code>
$\sqcup$	<code>\sqcupdot</code>	$\square$	<code>\medsquare, \square, \Box,</code> <code>\mdlgwhtsquare, \mdwhtsquare</code>
$\sqcap$	<code>\sqcapdot</code>		
$\sqcup$	<code>\sqcupplus</code>		
$\sqcap$	<code>\sqcapplus</code>		
$\lrcorner$	<code>\pullback</code>		
$\rceil$	<code>\pushout</code>		
$\blacktriangleright$	<code>\smalltriangleright</code>		
$\triangleup$	<code>\smalltriangleup</code>		
$\triangleleft$	<code>\smalltriangleleft</code>		
$\triangledown$	<code>\smalltriangledown</code>		
$\blacktriangleright$	<code>\smallblacktriangleright</code>		
$\blacktriangleup$	<code>\smallblacktriangleup</code>		
$\blacktriangleleft$	<code>\smallblacktriangleleft</code>		
$\blacktriangledown$	<code>\smallblacktriangledown</code>		
$\blacktriangleright$	<code>\medtriangleright,</code> <code>\triangleright</code>		

■	<code>\medblacksquare,</code> <code>\mdlgblksquare, \mdblksquare</code>	◇	<code>\diamondslash</code>
▢	<code>\boxminus</code>	◇	<code>\diamondbackslash,</code> <code>\diamondbslash</code>
▣	<code>\boxvert, \boxbar</code>	⋈	<code>\diamondplus</code>
▤	<code>\boxslash, \boxdiag</code>	⋈	<code>\diamondtimes</code>
▥	<code>\boxbackslash, \boxbslash</code>	◇	<code>\diamondddot, \diamondcdot</code>
⊞	<code>\boxplus</code>	⋈	<code>\diamondddiamond</code>
⊠	<code>\boxtimes</code>	☆	<code>\smallwhitestar, \smwhitestar</code>
▣	<code>\boxdot</code>	★	<code>\smallblackstar, \star</code>
▣	<code>\boxbox</code>	☆	<code>\medwhitestar</code>
◇	<code>\smalldiamond, \diamond,</code> <code>\smwhtdiamond</code>	★	<code>\medblackstar, \medstar</code>
◆	<code>\smallblackdiamond,</code> <code>\blackdiamond, \smbldiamond</code>	*	<code>*, \ast</code>
◇	<code>\meddiamond, \Diamond,</code> <code>\mdlgwhtdiamond,</code> <code>\mdwhtdiamond</code>	⌈	<code>\intercal</code>
◆	<code>\medblackdiamond,</code> <code>\mdlgblkdiamond,</code> <code>\mdblkdiamond</code>	⌋	<code>\wreath, \wr</code>
◇	<code>\diamondminus</code>	⌈	<code>\amalg</code>
◇	<code>\diamondvert</code>	◁	<code>\lhd</code>
		▷	<code>\rhd</code>
		⊲	<code>\unlhd</code>
		⊳	<code>\unrhd</code>
		/	<code>\divslash</code>
		\	<code>\setminus</code>

### 4.3 Relations

=	<code>=, \equal, \Relbar</code>	≐	<code>\doteq</code>
≡	<code>\equiv</code>	≐	<code>\eqdot</code>
~	<code>\sim</code>	≐	<code>\Doteq</code>
↖	<code>\backsimeq</code>	≐	<code>\fallingdotseq</code>
≈	<code>\approx</code>	≐	<code>\risingdotseq</code>
≈	<code>\triplesim, \approxident</code>	≐	<code>\coloneq, \coloneqq</code>
≈	<code>\simeq</code>	≐	<code>\eqcolon, \eqqcolon</code>
≈	<code>\backsimeq</code>	☺	<code>\smile, \smallsmile</code>
≈	<code>\eqsim</code>	☹	<code>\frown, \smallfrown</code>
≡	<code>\cong</code>	☺	<code>\smilefrown, \asymp</code>
≡	<code>\backcong</code>	◌	<code>\frownsmile, \closure</code>
≡	<code>\dotcong</code>	≡	<code>\smileeq</code>
≈	<code>\approxeq</code>	≡	<code>\frowneq, \arceq</code>
≈	<code>\bumpeq</code>	≡	<code>\eqcirc</code>
≡	<code>\bumpeq</code>	≡	<code>\circeq</code>
≈	<code>\Bumpeq</code>	≡	<code>\wedgedeq, \hateq</code>

$\varepsilon$	<code>\veeeq</code>	$\sqsubseteq$	<code>\sqsubseteq</code>	<code>\sqsubseteq</code>	<code>\sqsubseteq</code>
$\doteq$	<code>\stareq</code>	$\sqsupseteq$	<code>\sqsupseteq</code>	$\sqsupseteq$	<code>\sqsupseteq</code>
$\trianglelefteq$	<code>\trianglelefteq, \trianglelefteq</code>	$\sqsubset$	<code>\sqsubset</code>	$\sqsubset$	<code>\sqsubset</code>
$\in$	<code>\in</code>	$\supseteq$	<code>\supseteq</code>	$\supseteq$	<code>\supseteq</code>
$\owns$	<code>\owns, \ni</code>	$\subset$	<code>\subset</code>	$\subset$	<code>\subset</code>
$<$	<code>&lt;, \less</code>	$\supset$	<code>\supset</code>	$\supset$	<code>\supset</code>
$>$	<code>&gt;, \gtr</code>	$\subseteq$	<code>\subseteq</code>	$\subseteq$	<code>\subseteq</code>
$\leq$	<code>\leq, \le</code>	$\supseteq$	<code>\supseteq</code>	$\supseteq$	<code>\supseteq</code>
$\geq$	<code>\geq, \ge</code>	$\subseteq$	<code>\subseteq</code>	$\subseteq$	<code>\subseteq</code>
$\leqslant$	<code>\leqslant</code>	$\supseteq$	<code>\supseteq</code>	$\supseteq$	<code>\supseteq</code>
$\geqslant$	<code>\geqslant</code>	$\Subset$	<code>\Subset</code>	$\Subset$	<code>\Subset</code>
$\leqq$	<code>\leqq</code>	$\Supset$	<code>\Supset</code>	$\prec$	<code>\prec</code>
$\geqq$	<code>\geqq</code>	$\succ$	<code>\succ</code>	$\succ$	<code>\succ</code>
$\lesssim$	<code>\lesssim</code>	$\preceq$	<code>\preceq</code>	$\preceq$	<code>\preceq</code>
$\gtrsim$	<code>\gtrsim</code>	$\succeq$	<code>\succeq</code>	$\preccurlyeq$	<code>\preccurlyeq</code>
$\lessapprox$	<code>\lessapprox</code>	$\succcurlyeq$	<code>\succcurlyeq</code>	$\preceqq$	<code>\preceqq</code>
$\gtrapprox$	<code>\gtrapprox</code>	$\succcurlyeq$	<code>\succcurlyeq</code>	$\succeqq$	<code>\succeqq</code>
$\lessgtr$	<code>\lessgtr</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gtrless$	<code>\gtrless</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\lesseqgtr$	<code>\lesseqgtr</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gtreqless$	<code>\gtreqless</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\lesseqqgtr$	<code>\lesseqqgtr</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gtreqqlless$	<code>\gtreqqlless</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\lesseqslantgtr$	<code>\lesseqslantgtr, \lesq</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gtreqslantless$	<code>\gtreqslantless, \gesl</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\ll$	<code>\ll</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gg$	<code>\gg</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\lll$	<code>\lll, \lllless</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\ggg$	<code>\ggg, \gggtr</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\lessclosed$	<code>\lessclosed, \vartriangleleft</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gtrclosed$	<code>\gtrclosed, \vartriangleright</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\leqclosed$	<code>\leqclosed, \trianglelefteq</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\geqclosed$	<code>\geqclosed, \trianglerighteq</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\lesscc$	<code>\lesscc, \ltcc</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\gtrcc$	<code>\gtrcc, \gtcc</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\leqslcc$	<code>\leqslcc, \lescc</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\geqslcc$	<code>\geqslcc, \gescc</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\sqsubset$	<code>\sqsubset</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\sqsupset$	<code>\sqsupset</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\sqsubseteq$	<code>\sqsubseteq</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>
$\sqsupseteq$	<code>\sqsupseteq</code>	$\prec$	<code>\prec</code>	$\prec$	<code>\prec</code>

$\nwarrow$	<code>\nwarrow</code>	$\Leftrightarrow$	<code>\Leftmapsto, \Mapsfrom</code>
$\swarrow$	<code>\swarrow</code>	$\Downarrow$	<code>\Downmapsto, \Mapsdown</code>
$\searrow$	<code>\searrow</code>	$\hookrightarrow$	<code>\hookrightarrow</code>
$\Rightarrow$	<code>\Rrightarrow</code>	$\upharpoonright$	<code>\hookuparrow</code>
$\Uparrow$	<code>\Uparrow</code>	$\hookleftarrow$	<code>\varhookleftarrow</code>
$\Leftarrow$	<code>\Leftarrow</code>	$\downarrow$	<code>\varhookdownarrow</code>
$\Downarrow$	<code>\Downarrow</code>	$\nearrow$	<code>\varhooknearrow</code>
$\nearrow$	<code>\Nearrow</code>	$\hookrightarrow$	<code>\hookrightarrow, \hknwarrow</code>
$\nwarrow$	<code>\Nwarrow</code>	$\swarrow$	<code>\varhookswarrow</code>
$\swarrow$	<code>\Swarrow</code>	$\searrow$	<code>\hooksearrow, \hksearrow</code>
$\searrow$	<code>\Searrow</code>	$\rightarrow$	<code>\varhookrightarrow</code>
$\leftrightarrow$	<code>\leftrightharpoonup</code>	$\upharpoonright$	<code>\varhookuparrow</code>
$\updownarrow$	<code>\updownarrow</code>	$\hookleftarrow$	<code>\hookleftarrow</code>
$\nearrow$	<code>\neswarrow</code>	$\downarrow$	<code>\hookdownarrow</code>
$\nwarrow$	<code>\nwsearrow</code>	$\nearrow$	<code>\hooknearrow, \hknearrow</code>
$\Leftrightarrow$	<code>\Leftrightharpoonup</code>	$\nwarrow$	<code>\varhooknwarrow</code>
$\updownarrow$	<code>\Updownarrow</code>	$\nearrow$	<code>\hookswarrow, \hkswarrow</code>
$\nearrow$	<code>\Neswarrow</code>	$\searrow$	<code>\varhooksearrow</code>
$\nwarrow$	<code>\Nwsearrow</code>	$\rightarrow$	<code>\rightharpoonup</code>
$\rightarrow$	<code>\twoheadrightarrow</code>	$\leftarrow$	<code>\upharpoonleft</code>
$\uparrow$	<code>\twoheaduparrow</code>	$\leftarrow$	<code>\leftharpoonup</code>
$\leftarrow$	<code>\twoheadleftarrow</code>	$\downarrow$	<code>\downharpoonright</code>
$\downarrow$	<code>\twoheaddownarrow</code>	$\nearrow$	<code>\neharpoonnw</code>
$\nearrow$	<code>\twoheadnearrow</code>	$\nwarrow$	<code>\nwharpoonsw</code>
$\nwarrow$	<code>\twoheadnwarrow</code>	$\swarrow$	<code>\swharpoonse</code>
$\swarrow$	<code>\twoheadswarrow</code>	$\searrow$	<code>\seharpoonse</code>
$\searrow$	<code>\twoheadsearrow</code>	$\rightarrow$	<code>\rightharpoonup</code>
$\rightarrow$	<code>\rightarrowtail</code>	$\upharpoonright$	<code>\upharpoonright, \restriction</code>
$\uparrow$	<code>\uparrowtail</code>	$\leftarrow$	<code>\leftharpoonup</code>
$\leftarrow$	<code>\leftarrowtail</code>	$\downarrow$	<code>\downharpoonleft</code>
$\downarrow$	<code>\downarrowtail</code>	$\nearrow$	<code>\neharpoonse</code>
$\nearrow$	<code>\nearrowtail</code>	$\nwarrow$	<code>\nwharpoonse</code>
$\nwarrow$	<code>\nwarrowtail</code>	$\swarrow$	<code>\swharpoonnw</code>
$\swarrow$	<code>\swarrowtail</code>	$\searrow$	<code>\seharpoonsw</code>
$\searrow$	<code>\searrowtail</code>	$\leftrightarrow$	<code>\leftrightharpoonupdown</code>
$\mapsto$	<code>\rightmapsto, \mapsto</code>	$\updownarrow$	<code>\updownharpoonleftright</code>
$\Uparrow$	<code>\upmapsto, \mapsto</code>	$\nearrow$	<code>\neswharpoonnwse</code>
$\Leftarrow$	<code>\leftmapsto, \mapsfrom</code>	$\nwarrow$	<code>\nwseharpoonnesw</code>
$\Downarrow$	<code>\downmapsto, \mapsdown</code>	$\rightarrow$	<code>\leftrightharpoonupdown</code>
$\Rightarrow$	<code>\Rightmapsto, \Mapsto</code>	$\updownarrow$	<code>\updownharpoonrightleft</code>
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













































































































$\nwarrow$	<code>\nwseharpoonswne</code>	$\nrightarrow$	<code>\nwnwarrows</code>
$\Rightarrow$	<code>\rightleftharpoons</code>	$\swarrow$	<code>\swswarrows</code>
$\Updownarrow$	<code>\updownharpoons,</code> <code>\updownharpoonsleftright</code>	$\searrow$	<code>\sesearrows</code>
$\nearrow$	<code>\neswharpoons</code>	$\rightleftarrows$	<code>\rightleftarrows</code>
$\searrow$	<code>\senwharpoons</code>	$\updownarrows$	<code>\updownarrows</code>
$\Leftrightarrow$	<code>\leftrightharpoons</code>	$\nearrow$	<code>\neswarrows</code>
$\Downarrow$	<code>\downupharpoons,</code> <code>\downupharpoonsleftright</code>	$\nwarrow$	<code>\nwsearrows</code>
$\swarrow$	<code>\swneharpoons</code>	$\leftrightharpoons$	<code>\leftrightharpoons</code>
$\searrow$	<code>\nwseharpoons</code>	$\updownarrows$	<code>\updownarrows</code>
$\rightarrow$	<code>\rightbkarrow,\dashrightarrow,</code> <code>\dasharrow</code>	$\swarrow$	<code>\swnearrows</code>
$\uparrow$	<code>\upbkarrow</code>	$\searrow$	<code>\senwarrows</code>
$\leftarrow$	<code>\leftbkarrow,\dashleftarrow</code>	$\rightsquigarrow$	<code>\rightwavearrow,\leadsto,</code> <code>\rightsquigarrow,</code> <code>\rightcurvedarrow</code>
$\downarrow$	<code>\downbkarrow</code>	$\uparrow$	<code>\varupwavearrow</code>
$\nearrow$	<code>\nebkarrow</code>	$\leftarrow$	<code>\varleftwavearrow</code>
$\nwarrow$	<code>\nwbkarrow</code>	$\downarrow$	<code>\downwavearrow</code>
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$\searrow$	<code>\sebkarrow</code>	$\uparrow$	<code>\upwavearrow</code>
$\rightarrow$	<code>\rightspoon,\multimap</code>	$\leftarrow$	<code>\leftwavearrow,</code> <code>\leftsquigarrow,</code> <code>\leftcurvedarrow</code>
$\uparrow$	<code>\upspoon,\circmid</code>	$\downarrow$	<code>\vardownwavearrow</code>
$\leftarrow$	<code>\leftspoon,\multimapinv</code>	$\rightleftarrows$	<code>\leftrightwavearrow,</code> <code>\leftrightsquigarrow</code>
$\downarrow$	<code>\downspoon,\midcir</code>	$\updownarrows$	<code>\updownwavearrow</code>
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$\leftarrow$	<code>\leftblackspoon</code>	$\rightarrow$	<code>\cwoverarcarrow,</code> <code>\curvearrowright</code>
$\downarrow$	<code>\downblackspoon</code>	$\leftarrow$	<code>\cwleftarcarrow</code>
$\rightarrow$	<code>\leftrightspoon,\dualmap</code>	$\sim$	<code>\cwunderarcarrow</code>
$\rightarrow$	<code>\leftrightblackspoon</code>	$\downarrow$	<code>\cwrightarcarrow</code>
$\rightarrow$	<code>\blackwhitespoon,\imageof</code>	$\nearrow$	<code>\cwnwarcarrow,</code> <code>\rightupcurvedarrow</code>
$\rightarrow$	<code>\whiteblackspoon,\origof</code>	$\nwarrow$	<code>\cswwarcarrow,</code> <code>\upleftcurvedarrow</code>
$\rightarrow$	<code>\rightpitchfork</code>	$\swarrow$	<code>\cwsearcarrow,</code> <code>\leftdowncurvedarrow</code>
$\rightarrow$	<code>\uppitchfork,\pitchfork</code>	$\searrow$	<code>\cwnearcarrow,</code> <code>\downrightcurvedarrow</code>
$\rightarrow$	<code>\leftpitchfork</code>		
$\rightarrow$	<code>\downpitchfork</code>		
$\Rightarrow$	<code>\righttrightarrows</code>		
$\Uparrow$	<code>\upuparrows</code>		
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




























































	<code>\acwunderarccarrow</code>		<code>\longrightarrow</code>
	<code>\acwrightarccarrow</code>		<code>\longleftarrow</code>
	<code>\acwoverarccarrow,</code> <code>\curvearrowleft</code>		<code>\Longrightarrow</code>
	<code>\acwleftarccarrow</code>		<code>\Longleftarrow</code>
	<code>\acwsearccarrow,</code> <code>\uprightcurvecarrow</code>		<code>\longleftrightharrow</code>
	<code>\acwnearccarrow,</code> <code>\leftupcurvedarrow</code>		<code>\Longleftrightharrow</code>
	<code>\acwnwarccarrow,</code> <code>\downleftcurvedarrow</code>		<code>\longmapsto</code>
	<code>\acswwarccarrow,</code> <code>\righdowncurvedarrow</code>		<code>\longmapsfrom</code>
	<code>\bdoverarccarrow</code>		<code>\Longmapsfrom</code>
	<code>\bdleftarccarrow</code>		<code>\longrightwavyarrow,</code> <code>\longleadsto,</code> <code>\longrightsquigarrow</code>
	<code>\bdunderarccarrow</code>		<code>\longleftwavyarrow,</code> <code>\longleftsquigarrow</code>
	<code>\bdrigharccarrow</code>		<code>\longleftfootline,\vlongdash</code>
	<code>\bdnwarccarrow</code>		<code>\longrightfootline,\longdashv</code>
	<code>\bdswarccarrow</code>		<code>\Lsh</code>
	<code>\bdsearccarrow</code>		<code>\Rsh</code>
	<code>\bdnearccarrow</code>		<code>\Ldsh</code>
	<code>\leftfootline</code>		<code>\Rdsh</code>
	<code>\rightfootline</code>		<code>\looparrowright</code>
	<code>\acwcirculararrowup</code>		<code>\looparrowleft</code>
	<code>\acwcirculararrowleft,</code> <code>\circlearrowleft,</code> <code>\acwopencirculararrow</code>		<code>\rightvdash,\vdash</code>
	<code>\acwcirculararrowdown,</code> <code>\acwgapcirculararrow</code>		<code>\upvdash,\perp</code>
	<code>\acwcirculararrowright</code>		<code>\leftvdash,\dashv</code>
	<code>\cwcirculararrowdown,</code> <code>\cwgapcirculararrow</code>		<code>\downvdash</code>
	<code>\cwcirculararrowright,</code> <code>\circlearrowright,</code> <code>\cwopencirculararrow</code>		<code>\rightassert,\assert,</code> <code>\shortrighttack</code>
	<code>\cwcirculararrowup</code>		<code>\upassert,\shortuptack</code>
	<code>\cwcirculararrowleft</code>		<code>\leftassert,\shortlefttack</code>
	<code>\Rrightarrow</code>		<code>\downassert,\shortdowntack</code>
	<code>\Uparrow</code>		<code>\rightvDash,\vDash</code>
	<code>\Lleftarrow</code>		<code>\upvDash,\Vbar</code>
	<code>\Ddownarrow</code>		<code>\leftvDash,\Dashv</code>
			<code>\downvDash,\barV</code>
			<code>\rightmodels,\models</code>
			<code>\upmodels</code>
			<code>\leftmodels</code>
			<code>\downmodels</code>
			<code>\rightVdash,\Vdash</code>

$\perp$	<code>\upVdash</code>	$\neqcirc$	<code>\neqcirc</code>
$\dashv$	<code>\leftVdash, \dashV</code>	$\ncirceq$	<code>\ncirceq</code>
$\top$	<code>\downVdash</code>	$\nwedgeq, \nhateq$	<code>\nwedgeq, \nhateq</code>
$\Vdash$	<code>\rightAssert, \Assert</code>	$\nveeeq$	<code>\nveeeq</code>
$\vDash$	<code>\upAssert, \vBar</code>	$\nstareq$	<code>\nstareq</code>
$\dashv$	<code>\leftAssert</code>	$\ntrianglelefteq$	<code>\ntrianglelefteq</code>
$\top$	<code>\downAssert, \Barv</code>	$\notin, \notin$	<code>\notin, \notin</code>
$\Vdash$	<code>\rightVDash, \VDash</code>	$\owns, \nni$	<code>\owns, \nni</code>
$\perp$	<code>\upVDash</code>	$\nless$	<code>\nless</code>
$\dashv$	<code>\leftVDash, \DashV</code>	$\ngtr$	<code>\ngtr</code>
$\top$	<code>\downVDash</code>	$\nleq$	<code>\nleq</code>
$\Vdash$	<code>\Vvdash</code>	$\ngeq$	<code>\ngeq</code>
$\dashv$	<code>\dashVv</code>	$\nleqslant$	<code>\nleqslant</code>
$\vDash$	<code>\vDdash</code>	$\ngeqslant$	<code>\ngeqslant</code>
$\equiv$	<code>\Ddashv</code>	$\nleqq$	<code>\nleqq</code>
$\neq$	<code>\nequal, \neq, \ne</code>	$\ngeqq$	<code>\ngeqq</code>
$\equiv$	<code>\nequiv</code>	$\nlesssim$	<code>\nlesssim</code>
$\sim$	<code>\nsim</code>	$\ngtrsim$	<code>\ngtrsim</code>
$\backsim$	<code>\backsim</code>	$\nlessapprox$	<code>\nlessapprox</code>
$\approx$	<code>\approx</code>	$\ngtrapprox$	<code>\ngtrapprox</code>
$\tripleapprox$	<code>\tripleapprox, \approxident</code>	$\nlessgtr$	<code>\nlessgtr</code>
$\simeq$	<code>\simeq, \sime</code>	$\ngtrless$	<code>\ngtrless</code>
$\backsimeq$	<code>\backsimeq</code>	$\nlesseqgtr$	<code>\nlesseqgtr</code>
$\neqsim$	<code>\neqsim</code>	$\ngtreqlless$	<code>\ngtreqlless</code>
$\ncong$	<code>\ncong</code>	$\nlesseqqgtr$	<code>\nlesseqqgtr</code>
$\backcong$	<code>\backcong</code>	$\ngtreqqless$	<code>\ngtreqqless</code>
$\approxeq$	<code>\approxeq</code>	$\nlesseqslantgtr, \nlesg$	<code>\nlesseqslantgtr, \nlesg</code>
$\bumpeq$	<code>\bumpeq</code>	$\ngtreqslantless, \ngesl$	<code>\ngtreqslantless, \ngesl</code>
$\bumpeq$	<code>\bumpeq</code>	$\nll$	<code>\nll</code>
$\Bumpeq$	<code>\Bumpeq</code>	$\ngg$	<code>\ngg</code>
$\doteq$	<code>\doteq</code>	$\nlll$	<code>\nlll</code>
$\neqdot$	<code>\neqdot</code>	$\nggg$	<code>\nggg</code>
$\Doteq$	<code>\Doteq</code>	$\nlessclosed, \ntriangleleftleft$	<code>\nlessclosed, \ntriangleleftleft</code>
$\fallingdotseq$	<code>\fallingdotseq</code>	$\ngtrclosed, \ntrianglerightright$	<code>\ngtrclosed, \ntrianglerightright</code>
$\risingdotseq$	<code>\risingdotseq</code>	$\nleqclosed, \ntrianglelefteq$	<code>\nleqclosed, \ntrianglelefteq</code>
$\smile$	<code>\smile</code>	$\ngeqclosed, \ntrianglerightrighteq$	<code>\ngeqclosed, \ntrianglerightrighteq</code>
$\frown$	<code>\frown</code>	$\nlesscc, \nltcc$	<code>\nlesscc, \nltcc</code>
$\smilefrown, \nasym$	<code>\smilefrown, \nasym</code>	$\ngtrcc, \ngtcc$	<code>\ngtrcc, \ngtcc</code>
$\frownsmile, \nclosure$	<code>\frownsmile, \nclosure</code>	$\nleqslcc, \nlescc$	<code>\nleqslcc, \nlescc</code>
$\smileeq$	<code>\smileeq</code>	$\ngeqslcc, \ngescc$	<code>\ngeqslcc, \ngescc</code>
$\frowneq, \narceq$	<code>\frowneq, \narceq</code>	$\nsqsubset$	<code>\nsqsubset</code>

$\nsqsupset$	$\lneqq, \lvertneqq$
$\nsqsubseteq$	$\gneqq, \gvertneqq$
$\nsqsupseteq$	$\lnsim$
$\nsqsubseteqq$	$\gnsim$
$\nsqsupseteqq$	$\lnapprox$
$\nSqsubset$	$\gnapprox$
$\nSqsupset$	$\sqsubsetneq$
$\subset$	$\sqsupsetneq$
$\supset$	$\sqsubsetneqq$
$\subseteq$	$\sqsupsetneqq$
$\supseteq$	$\subsetneq, \varsubsetneq$
$\subseteqq$	$\supsetneq, \varsupsetneq$
$\supseteqq$	$\subsetneqq, \varsubsetneqq$
$\nSubset$	$\supsetneqq, \varsupsetneqq$
$\nSupset$	$\precneq$
$\nprec$	$\succneq$
$\nsucc$	$\precneqq$
$\npreceq$	$\succneqq$
$\nsucceq$	$\precnsim$
$\npreccurlyeq$	$\succnsim$
$\nsucccurlyeq$	$\precnapprox$
$\npreceqq$	$\succnapprox$
$\nsucceqq$	$\rightarrow, \into$
$\nprecsim$	$\nuparrow$
$\nsuccsim$	$\nleftarrow, \ngets$
$\nprecapprox$	$\ndownarrow$
$\nsuccapprox$	$\nnearrow$
$\nlessdot$	$\nnwarrow$
$\ngtrdot$	$\nswarrow$
$\nleqdot$	$\nsearrow$
$\ngeqdot$	$\rightarrow$
$\nleqslantdot, \nlesdot$	$\nUparrow$
$\ngeqslantdot, \ngesdot$	$\nLeftarrow$
$\neqslantless$	$\nDownarrow$
$\neqslantgtr$	$\nNearrow$
$\ncurlyeqprec$	$\nNwarrow$
$\ncurlyeqsucc$	$\nSwarrow$
$\simneqq$	$\nSearrow$
$\backsimneqq$	$\nleftrightharrow$
$\lneq$	$\nupdownarrow$
$\gneq$	$\nneswarrow$

	<code>\nnwsearrow</code>		<code>\nhooknearrow, \nhknearrow</code>
	<code>\nLeftrightarrow</code>		<code>\nvarhooknearrow</code>
	<code>\nUpdownarrow</code>		<code>\nhookswarrow, \nhkswarrow</code>
	<code>\nNeswarrow</code>		<code>\nvarhooksearrow</code>
	<code>\nNwsearrow</code>		<code>\nrightharpoonup</code>
	<code>\ntwoheadrightarrow</code>		<code>\nupharpoonleft</code>
	<code>\ntwoheaduparrow</code>		<code>\nleftharpoondown</code>
	<code>\ntwoheadleftarrow</code>		<code>\ndownharpoonright</code>
	<code>\ntwoheaddownarrow</code>		<code>\nneharpoonnw</code>
	<code>\ntwoheadnearrow</code>		<code>\nnwharpoonsw</code>
	<code>\ntwoheadnwarrow</code>		<code>\nswharpoonse</code>
	<code>\ntwoheadswarrow</code>		<code>\nseharpoonne</code>
	<code>\ntwoheadsearrow</code>		<code>\nrightharpoondown</code>
	<code>\nrightharpoonright</code>		<code>\nupharpoonright,</code>
	<code>\nuparrowsymbol</code>		<code>\nrestriction</code>
	<code>\nleftarrowtail</code>		<code>\nleftharpoonup</code>
	<code>\ndownarrowtail</code>		<code>\ndownharpoonleft</code>
	<code>\nnearrowtail</code>		<code>\nneharpoonse</code>
	<code>\nnwarrowtail</code>		<code>\nnwharpoonne</code>
	<code>\nswarrowtail</code>		<code>\nswharpoonnw</code>
	<code>\nsearrowtail</code>		<code>\nseharpoonsw</code>
	<code>\nrightrightarrow, \nmapsto</code>		<code>\nleftrightharpoonupdown</code>
	<code>\nupmapsto, \nmapsup</code>		<code>\nupdownharpoonleftright</code>
	<code>\nleftmapsto, \nmapsfrom</code>		<code>\nneswharpoonnwse</code>
	<code>\ndownmapsto, \nmapsdwn</code>		<code>\nnwseharpoonnesw</code>
	<code>\nRightmapsto, \nMapsto</code>		<code>\nleftrightharpoondownup</code>
	<code>\nUpmapsto, \nMapsup</code>		<code>\nupdownharpoonrightleft</code>
	<code>\nLeftmapsto, \nMapsfrom</code>		<code>\nneswharpoonsenw</code>
	<code>\nDownmapsto, \nMapsdwn</code>		<code>\nnwseharpoonswne</code>
	<code>\nhookrightarrow</code>		<code>\nrightrightarpoons</code>
	<code>\nhookuparrow</code>		<code>\nupdownharpoons,</code>
	<code>\nvarhookleftarrow</code>		<code>\nupdownharpoonsleftright</code>
	<code>\nvarhookdownarrow</code>		<code>\nneswharpoons</code>
	<code>\nvarhooknearrow</code>		<code>\nsenwharpoons</code>
	<code>\nhooknearrow, \nhknarrow</code>		<code>\nleftrightharpoons</code>
	<code>\nvarhookswarrow</code>		<code>\ndownupharpoons,</code>
	<code>\nhooksearrow, \nhksearrow</code>		<code>\ndownupharpoonsleftright</code>
	<code>\nvarhookrightarrow</code>		<code>\nswneharpoons</code>
	<code>\nvarhookuparrow</code>		<code>\nnwseharpoons</code>
	<code>\nhookleftarrow</code>		<code>\nrightrightarrow, \ndasharrow,</code>
	<code>\nhookdownarrow</code>		<code>\ndashrightarrow</code>

	<code>\nupbkarrow</code>		<code>\nrightwavearrow, \nleadsto,</code>
	<code>\nleftbkarrow, \ndashleftarrow</code>		<code>\nrightrightarrow,</code>
	<code>\ndownbkarrow</code>		<code>\nrightrightcurvedarrow</code>
	<code>\nnebkarrow</code>		<code>\nvarupwavearrow</code>
	<code>\nnwbkarrow</code>		<code>\nvarleftwavearrow</code>
	<code>\nswbkarrow</code>		<code>\ndownwavearrow</code>
	<code>\nsebkarrow</code>		<code>\nvarrightwavearrow</code>
	<code>\nrighthspoon, \nmultimap</code>		<code>\nupwavearrow</code>
	<code>\nupspoon, \ncirmid</code>		<code>\nleftwavearrow,</code>
	<code>\nleftspoon, \nmultimapinv</code>		<code>\nleftsquigarrow,</code>
	<code>\ndownspoon, \nmidcir</code>		<code>\nleftcurvedarrow</code>
	<code>\nrighthblackspoon</code>		<code>\nvardownwavearrow</code>
	<code>\nupblackspoon</code>		<code>\nleftrighthwavearrow,</code>
	<code>\nleftblackspoon</code>		<code>\nleftrightsquigarrow</code>
	<code>\ndownblackspoon</code>		<code>\nupdownwavearrow</code>
	<code>\nleftrighthspoon, \ndualmap</code>		<code>\nvarleftrighthwavearrow</code>
	<code>\nleftrighthblackspoon</code>		<code>\nvarupdownwavearrow</code>
	<code>\nblackwhitespoon, \nimageof</code>		<code>\ncwoverarcarrow,</code>
	<code>\nwhiteblackspoon, \norigof</code>		<code>\ncurvearrowright</code>
	<code>\nrighthpitchfork</code>		<code>\ncwleftarcarrow</code>
	<code>\nuppitchfork, \npitchfork</code>		<code>\ncwunderarcarrow</code>
	<code>\nleftpitchfork</code>		<code>\ncwrightarcarrow</code>
	<code>\ndownpitchfork</code>		<code>\ncwnwarcarrow,</code>
	<code>\nrightrightarrows</code>		<code>\nrightrightcurvedarrow</code>
	<code>\nupuparrows</code>		<code>\ncwswarcarrow,</code>
	<code>\nleftleftarrows</code>		<code>\nupleftcurvedarrow</code>
	<code>\ndowndownarrows</code>		<code>\ncwsearcarrow,</code>
	<code>\nnenearrows</code>		<code>\nleftdowncurvedarrow</code>
	<code>\nnwnwarrows</code>		<code>\ncwnearcarrow,</code>
	<code>\nswswarrows</code>		<code>\ndownrightcurvedarrow</code>
	<code>\nsesearrows</code>		<code>\nacwunderarcarrow</code>
	<code>\nrightrightarrows</code>		<code>\nacwrightarcarrow</code>
	<code>\nupdownarrows</code>		<code>\nacwoverarcarrow,</code>
	<code>\nneswarrows</code>		<code>\ncurvearrowleft</code>
	<code>\nnwsearrows</code>		<code>\nacwleftarcarrow</code>
	<code>\nleftrightharrows</code>		<code>\nacwsearcarrow,</code>
	<code>\ndownuparrows</code>		<code>\nuprightcurvearrow</code>
	<code>\nswnearrows</code>		<code>\nacwnearcarrow,</code>
	<code>\nsenwarrows</code>		<code>\nleftupcurvedarrow</code>
			<code>\nacwnwarcarrow,</code>
			<code>\ndownleftcurvedarrow</code>

	<code>\nacswarcarrow,</code> <code>\rightrightcurvedarrow</code>		<code>\nlongrightwavearrow,</code> <code>\nlongleadsto,</code> <code>\nlongrightsquigarrow</code>
	<code>\nbdoverarcarrow</code>		<code>\nlongleftwavearrow,</code> <code>\nlongleftsquigarrow</code>
	<code>\nbdleftarcarrow</code>		<code>\nlongleftfootline,</code> <code>\nvlongdash</code>
	<code>\nbdunderarcarrow</code>		<code>\nlongrightfootline,</code> <code>\nlongdashv</code>
	<code>\nbdrightarcarrow</code>		<code>\nrightrvdash, \nvDash</code>
	<code>\nbdnwarcarrow</code>		<code>\nupvdash, \nperp</code>
	<code>\nbdswarcarrow</code>		<code>\nleftvdash, \ndashv</code>
	<code>\nbdsearcarrow</code>		<code>\ndownvdash</code>
	<code>\nbdnearcarrow</code>		<code>\nrighthassert, \nassert,</code> <code>\nshortrighttack</code>
	<code>\nleftfootline</code>		<code>\nupassert, \nshortuptack</code>
	<code>\nrightfootline</code>		<code>\nleftassert, \nshortlefttack</code>
	<code>\nacwcirculararrowup</code>		<code>\ndownassert, \nshortdowntack</code>
	<code>\nacwcirculararrowleft,</code> <code>\ncirculararrowleft,</code> <code>\nacwopencirculararrow</code>		<code>\nrightrvDash, \nvDash</code>
	<code>\nacwcirculararrowdown,</code> <code>\nacwgapcirculararrow</code>		<code>\nupvDash, \nVbar</code>
	<code>\nacwcirculararrowright</code>		<code>\nlefttvDash, \nDashv</code>
	<code>\ncwcirculararrowdown,</code> <code>\ncwgapcirculararrow</code>		<code>\ndownnvDash, \nbarV</code>
	<code>\ncwcirculararrowright,</code> <code>\ncirculararrowright,</code> <code>\ncwopencirculararrow</code>		<code>\nrightrmodels, \nmodels</code>
	<code>\ncwcirculararrowup</code>		<code>\nupmodels</code>
	<code>\ncwcirculararrowleft</code>		<code>\nleftmodels</code>
	<code>\nRrightarrow</code>		<code>\ndownmodels</code>
	<code>\nUparrow</code>		<code>\nrightrVdash, \nVdash</code>
	<code>\nLleftarrow</code>		<code>\nupVdash</code>
	<code>\nDdownarrow</code>		<code>\nleftVdash, \ndashV</code>
	<code>\nlongrightarrow</code>		<code>\ndownVdash</code>
	<code>\nlongleftarrow</code>		<code>\nrightrAssert, \nAssert</code>
	<code>\nLongrightarrow</code>		<code>\nupAssert, \nVbar</code>
	<code>\nLongleftarrow</code>		<code>\nleftAssert</code>
	<code>\nlongleftrightarrow</code>		<code>\ndownAssert, \nBarv</code>
	<code>\nLongleftrightarrow</code>		<code>\nrightrVDash, \nVDash</code>
	<code>\nlongmapsto</code>		<code>\nupVDash</code>
	<code>\nlongmapsfrom</code>		<code>\nleftVDash, \nDashV</code>
	<code>\nLongmapsto</code>		<code>\ndownVDash</code>
	<code>\nLongmapsfrom</code>		<code>\nVvdash</code>
			<code>\ndashVv</code>
			<code>\nvDdash</code>

$\#$	<code>\nDdashv</code>	$\times$	<code>\crossing</code>
$:$	<code>:\,\mathratio</code>	$\between$	<code>\between</code>
$::$	<code>\Colon</code>	$\shortmid$	<code>\shortmid</code>
$\bar{\phantom{x}}$	<code>\relbar</code>	$\mid$	<code>\mid,\divides</code>
$\dot{-}$	<code>\dotsminusdots</code>	$\nshortmid$	<code>\nshortmid</code>
$\Join$	<code>\rJoin</code>	$\nmid$	<code>\nmid,\ndivides</code>
$\Join$	<code>\lJoin</code>	$\parallel$	<code>\shortparallel</code>
$\bowtie$	<code>\bowtie,\Join</code>	$\parallel$	<code>\parallel</code>
$\propto$	<code>\propto,\varpropto</code>	$\nparallel$	<code>\nshortparallel</code>
$\backpropto$	<code>\backpropto,\propfrom</code>	$\nparallel$	<code>\nparallel</code>

## 4.4 Punctuation symbols

$\cdot$	<code>\cdot</code>	$:$	<code>\colon,\mathcolon</code>
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## 4.5 Large operators

$+$	$\bigplus$	$\bigsqcupplus$	<code>\bigsqcupplus</code>
$\times$	$\bigtimes$	$\bigoplus$	<code>\bigoplus</code>
$\wedge$	$\bigwedge$	$\bigotimes$	<code>\bigotimes</code>
$\vee$	$\bigvee$	$\bigodot$	<code>\bigodot</code>
$\wedge$	$\bigwedgedot$	$\big\oslash$	<code>\big\oslash</code>
$\vee$	$\bigveedot$	$\prod$	<code>\prod</code>
$\wedge$	$\bigdoublewedge,$	$\coprod$	<code>\coprod</code>
	$\conjquant$	$\sum$	<code>\sum</code>
$\vee$	$\bigdoublevee,\disjquant$	$\osum$	<code>\osum,\modtwosum</code>
$\curlywedge$	$\bigcurlywedge$	$\int$	<code>\int</code>
$\curlyvee$	$\bigcurlyvee$	$\iint$	<code>\iint</code>
$\cap$	$\bigcap$	$\iiint$	<code>\iiint</code>
$\cup$	$\bigcup$	$\iiiiint$	<code>\iiiiint</code>
$\cap\cdot$	$\bigcapdot$	$\int\cdots\int$	<code>\idotsint,\dotsint</code>
$\cup\cdot$	$\bigcupdot$	$\int$	<code>\landupint,\intclockwise</code>
$\cap+$	$\bigcapplus$	$\int$	<code>\landdownint,\awint,</code>
$\cup+$	$\bigcupplus,\bigcupplus$		<code>\intctrclockwise</code>
$\cap$	$\bigsqcap$	$\int$	<code>\intbar</code>
$\cup$	$\bigsqcup$	$\int$	<code>\intBar</code>
$\cap\cdot$	$\bigsqcapdot$		
$\cup\cdot$	$\bigsqcupdot$		
$\cap+$	$\bigsqcapplus$		



$\int$	$\int$	<code>\fint</code>			
$\oint$	$\oint$	<code>\oint</code>	$\oint$	$\oint$	<code>\varointclockwise</code>
$\oiint$	$\oiint$	<code>\oiint</code>	$\oint$	$\oint$	<code>\rcircleleftint,</code> <code>\varointctrcclockwise</code>
$\oiint$	$\oiint$	<code>\oiint</code>	$\oint$	$\oint$	<code>\lcircleleftint,</code> <code>\ointclockwise</code>
$\oiint$	$\oiint$	<code>\oiint</code>	$\int$	$\int$	<code>\sumint</code>
$\oint$	$\oint$	<code>\rcirclerightint,</code> <code>\ointctrcclockwise</code>	$\prod$	$\prod$	<code>\smallprod</code>
$\oint$	$\oint$	<code>\lcirclerightint,</code>	$\coprod$	$\coprod$	<code>\smallcoprod</code>
			$\int$	$\int$	<code>\smallint</code>
			$\sqrt{\phantom{x}}$	$\sqrt{\phantom{x}}$	<code>\surd</code>

## 4.6 Delimiters and accents

$((((($	$((((($	<code>(, \lparen</code>	$\ulcorner$	$\ulcorner$	<code>\ulcorner</code>
$)))))$	$)))))$	<code>), \rparen</code>	$\llcorner$	$\llcorner$	<code>\llcorner</code>
$[[[[[$	$[[[[[$	<code>[, \lbrack</code>	$\llbracket$	$\llbracket$	<code>\lsem, \lBrack</code>
$]]]]]$	$]]]]]$	<code>], \rbrack</code>	$\rrbracket$	$\rrbracket$	<code>\rsem, \rBrack</code>
$\lfloor\lfloor\lfloor\lfloor$	$\lfloor\lfloor\lfloor\lfloor$	<code>\lfloor</code>	$\{ \{ \{ \{$	$\{ \{ \{ \{$	<code>\lbrace, \{</code>
$\rfloor\rfloor\rfloor\rfloor$	$\rfloor\rfloor\rfloor\rfloor$	<code>\rfloor</code>	$\} \} \} \}$	$\} \} \} \}$	<code>\rbrace, \}</code>
$\lceil\lceil\lceil\lceil$	$\lceil\lceil\lceil\lceil$	<code>\lceil</code>	$\langle \langle \langle \langle$	$\langle \langle \langle \langle$	<code>\langle</code>
$\rceil\rceil\rceil\rceil$	$\rceil\rceil\rceil\rceil$	<code>\rceil</code>	$\rangle \rangle \rangle \rangle$	$\rangle \rangle \rangle \rangle$	<code>\rangle</code>
$\ulcorner$	$\ulcorner$	<code>\ulcorner</code>	$\angle$	$\angle$	<code>\Angle</code>
$\urcorner$	$\urcorner$	<code>\urcorner</code>	$\angle$	$\angle$	<code>\rAngle</code>
$\llcorner$	$\llcorner$	<code>\llcorner</code>	$\langle \langle \langle \langle$	$\langle \langle \langle \langle$	<code>\langedot</code>
$\lrcorner$	$\lrcorner$	<code>\lrcorner</code>	$\rangle \rangle \rangle \rangle$	$\rangle \rangle \rangle \rangle$	<code>\rangedot</code>
$\llcorner$	$\llcorner$	<code>\llcorner</code>	$\mathbin{/}$	$\mathbin{/}$	<code>\mathslash</code>
$\llcorner$	$\llcorner$	<code>\llcorner</code>	$\backslash$	$\backslash$	<code>\backslash</code>

$\left  \right $	<code> , \vert</code>	$\left[ \left[ \left[ \left[ \right. \right. \right. \right.$	<code>\lgroup</code>
$\left  \right  \right $	<code>\lvert</code>	$\left. \right. \right. \right)$	<code>\rgroup</code>
$\left  \right  \right  \right $	<code>\rvert</code>	$\left. \left. \left. \left. \right. \right. \right)$	<code>\lmoustache</code>
$\left  \right  \right  \right  \right $	<code>\Vert, \lVert</code>	$\left. \left. \left. \left. \right. \right. \right $	<code>\rmoustache</code>
$\left  \right  \right  \right  \right  \right $	<code>\lVert</code>	$\left  \right  \right  \right $	<code>\bracevert</code>
$\left  \right  \right  \right  \right  \right  \right $	<code>\rVert</code>	$\uparrow \uparrow \uparrow \uparrow$	<code>\uparrowarrow</code>
$\left  \right  \right  \right  \right  \right  \right  \right $	<code>\Vvert</code>	$\downarrow \downarrow \downarrow \downarrow$	<code>\downarrowarrow</code>
$\left  \right  \right  \right  \right  \right  \right  \right  \right $	<code>\lVvert</code>	$\updownarrow \updownarrow \updownarrow \updownarrow$	<code>\updownarrowarrow</code>
$\left  \right  \right  \right  \right  \right  \right  \right  \right  \right $	<code>\rVvert</code>	$\Uparrow \Uparrow \Uparrow \Uparrow$	<code>\Uparrow</code>
$\rightarrow$	<code>\arrowvert</code>	$\Downarrow \Downarrow \Downarrow \Downarrow$	<code>\Downarrow</code>
$\Uparrow$	<code>\Arrowvert</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>	$\mathbin{\!/\!}$	<code>\middleslash</code>
$\wideparen{xxx}$	<code>\wideparen{xxx}</code>	$\cancel{b}$	<code>\strokethrough</code>

## 4.7 Faked symbols

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

$\dagger$	<code>\dagger</code>	$\S$	<code>\mathsection</code>
$\ddagger$	<code>\ddagger</code>	$\$$	<code>\mathdollar</code>
$\P$	<code>\mathparagraph</code>	$\pounds$	<code>\mathsterling</code>

¥	\yen	ħ	\hslash
ℜ	\Re	®	\circledR
ℑ	\Im	Ⓢ	\circledS
ħ	\hbar		

## 4.8 Missing symbols

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

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

## 5 Implementation

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

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

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

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

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

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

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

```

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

```

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

```

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

```

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

```

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

```

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

```

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

```

```

59 \DeclareRobustCommand{\thicksim}{\mathrel{\text{\boldmath$\m@th\sim$}}}
60 \DeclareRobustCommand{\thickapprox}{\mathrel{\text{\boldmath$\m@th\approx$}}}
61 \let\hbar\undefined
62 \let\hslash\undefined
63 \DeclareRobustCommand{\hbar}{\middlebar h}
64 \DeclareRobustCommand{\hslash}{\middleslash h}
65 \DeclareRobustCommand{\centerdot}{\mathbin{\rule{0.15em}{0.15em}}}

```

Unneeded partial symbols.

```

66 \let\mapstochar\undefined
67 \let\lhook\undefined
68 \let\rhook\undefined

```

Shorthands to simplify the definitions below.

```

69 \newcommand\fdsy@setslot[1]{\@tempcnta #1\relax}
70 \newcommand\fdsy@nextslot{\advance\@tempcnta 1\relax}
71 \newcommand\fdsy@prevslot{\advance\@tempcnta-1\relax}
72
73 \newcommand\fdsy@DeclareSymbol[4]{\DeclareMathSymbol{#2}{#3}{#4}{#1}}
74 \newcommand\fdsy@DeclareSymbol[3]{%
75   \if\relax\noexpand#1\let#1\undefined\fi
76   \expandafter\fdsy@DeclareSymbol\expandafter{\the\@tempcnta}{#1}{#3}{#2}%
77   \fdsy@nextslot
78 }
79 \newcommand\fdsy@DeclareAlias[3]{\fdsy@prevslot\fdsy@DeclareSymbol{#1}{#2}{#3}}
80 \newcommand\fdsy@DeclareOperator[3]{\def#1{\DOTSB#3\slimits@}}
81 \newcommand\fdsy@DeclareIntegral[3]{\def#1{\DOTSI#3\ilimits@}}
82 \newcommand\fdsy@DeclareDelimiter[4]{%
83   \if\relax\noexpand#1\let#1\undefined\fi
84   \DeclareMathDelimiter{#1}{#2}{#3}{#4}{#3}{#4}%
85 }
86 \newcommand\fdsy@DeclareOpen[3]{\fdsy@DeclareDelimiter{#1}{\mathopen}{#2}{#3}}
87 \newcommand\fdsy@DeclareClose[3]{\fdsy@DeclareDelimiter{#1}{\mathclose}{#2}{#3}}

```

Font definitions.

```

88 \DeclareFontFamily{U}{FdSymbolA}{}
89 \DeclareFontFamily{U}{FdSymbolB}{}
90 \DeclareFontFamily{U}{FdSymbolC}{}
91 \DeclareFontFamily{U}{FdSymbolD}{}
92 \DeclareFontFamily{U}{FdSymbolE}{}
93 \DeclareFontFamily{U}{FdSymbolF}{}
94
95 \DeclareFontShape{U}{FdSymbolA}{m}{n}{
96   <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@msweight
97   <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@mweight
98 }{}
99 \DeclareFontShape{U}{FdSymbolA}{b}{n}{

```

```

100    <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@bsweight
101    <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@bweight
102 }{}
103 \DeclareFontShape{U}{FdSymbolB}{m}{n}{
104    <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@msweight
105    <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@mweight
106 }{}
107 \DeclareFontShape{U}{FdSymbolB}{b}{n}{
108    <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@bsweight
109    <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@bweight
110 }{}
111 \DeclareFontShape{U}{FdSymbolC}{m}{n}{
112    <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@msweight
113    <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@mweight
114 }{}
115 \DeclareFontShape{U}{FdSymbolC}{b}{n}{
116    <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@bsweight
117    <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@bweight
118 }{}
119 \DeclareFontShape{U}{FdSymbolD}{m}{n}{
120    <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@msweight
121    <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@mweight
122 }{}
123 \DeclareFontShape{U}{FdSymbolD}{b}{n}{
124    <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@bsweight
125    <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@bweight
126 }{}
127 \DeclareFontShape{U}{FdSymbolE}{m}{n}{
128    <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@msweight
129    <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@mweight
130 }{}
131 \DeclareFontShape{U}{FdSymbolE}{b}{n}{
132    <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@bsweight
133    <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@bweight
134 }{}
135 \DeclareFontShape{U}{FdSymbolF}{m}{n}{
136    <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@msweight
137    <7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@mweight
138 }{}
139 \DeclareFontShape{U}{FdSymbolF}{b}{n}{
140    <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@bsweight
141    <7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@bweight
142 }{}
143
144 \DeclareSymbolFont{symbols}{U}{FdSymbolA}{m}{n}

```

```

145 \DeclareSymbolFont{relations}{U}{FdSymbolB}{m}{n}
146 \DeclareSymbolFont{arrows}{U}{FdSymbolC}{m}{n}
147 \DeclareSymbolFont{narrows}{U}{FdSymbolD}{m}{n}
148 \DeclareSymbolFont{largesymbols}{U}{FdSymbolE}{m}{n}
149 \DeclareSymbolFont{delimiters}{U}{FdSymbolF}{m}{n}
150 \SetSymbolFont{symbols}{bold}{U}{FdSymbolA}{b}{n}
151 \SetSymbolFont{relations}{bold}{U}{FdSymbolB}{b}{n}
152 \SetSymbolFont{arrows}{bold}{U}{FdSymbolC}{b}{n}
153 \SetSymbolFont{narrows}{bold}{U}{FdSymbolD}{b}{n}
154 \SetSymbolFont{largesymbols}{bold}{U}{FdSymbolE}{b}{n}
155 \SetSymbolFont{delimiters}{bold}{U}{FdSymbolF}{b}{n}

```

At the moment, we still use cmsy for the calligraphic alphabet.

```

156 \DeclareMathAlphabet{\mathcal}{OMS}{cmsy}{m}{n}
157 \SetMathAlphabet{\mathcal}{bold}{OMS}{cmsy}{b}{n}

```

A command to take math symbols from text fonts.

```

158 \newcommand\fdsy@bold{bold}
159 \newcommand\fdsy@text[1]{%
160   \ifx\fdsy@bold\math@version
161     \text{\bfseries#1}%
162   \else
163     \text{\mdseries#1}%
164   \fi
165 }

```

FdSymbolA: binary operators and ordinary symbols

```

166 \fdsy@setslot{0}
167 \fdsy@DeclareSymbol{\cdot}{symbols}{\mathbin}
168 \fdsy@DeclareAlias{\cdotp}{symbols}{\mathpunct}
169 \fdsy@DeclareSymbol{\hdotdot}{symbols}{\mathbin}
170 \fdsy@DeclareSymbol{\vdotdot}{symbols}{\mathbin}
171 \fdsy@DeclareAlias{\colon}{symbols}{\mathpunct}
172 \fdsy@DeclareAlias{\mathcolon}{symbols}{\mathpunct}
173 \fdsy@DeclareAlias{\mathratio}{symbols}{\mathrel}
174 \fdsy@DeclareSymbol{\udotdot}{symbols}{\mathbin}
175 \fdsy@DeclareSymbol{\ddotdot}{symbols}{\mathbin}
176 \fdsy@DeclareSymbol{\hdots}{symbols}{\mathord}
177 \fdsy@DeclareAlias{@cdots}{symbols}{\mathinner}
178 \let\cdots\@cdots
179 \fdsy@DeclareSymbol{@vdots}{symbols}{\mathord}
180 \DeclareRobustCommand{\vdots}{\ifmmode\@vdots\else\hbox{$\@vdots$}\fi}
181 \fdsy@DeclareSymbol{\udots}{symbols}{\mathord}
182 \fdsy@DeclareAlias{\adots}{symbols}{\mathord}
183 \fdsy@DeclareSymbol{\ddots}{symbols}{\mathord}
184 \fdsy@DeclareSymbol{\righttherefore}{symbols}{\mathord}
185 \fdsy@DeclareSymbol{\uptherefore}{symbols}{\mathord}

```

```

186 \fdsy@DeclareAlias{\therefore}{symbols}{\mathord}
187 \fdsy@DeclareSymbol{\lefttherefore}{symbols}{\mathord}
188 \fdsy@DeclareSymbol{\downtherefore}{symbols}{\mathord}
189 \fdsy@DeclareAlias{\because}{symbols}{\mathord}
190 \fdsy@DeclareSymbol{\squaredots}{symbols}{\mathord}
191 \fdsy@DeclareAlias{\Colon}{symbols}{\mathrel}
192 \fdsy@DeclareSymbol{\minus}{symbols}{\mathbin}
193 \fdsy@DeclareSymbol{\medslash}{symbols}{\mathbin}
194 \fdsy@DeclareAlias{\smalldivslash}{symbols}{\mathbin}
195 \fdsy@DeclareSymbol{\medbackslash}{symbols}{\mathbin}
196 \fdsy@DeclareAlias{\smallsetminus}{symbols}{\mathbin}
197 \fdsy@DeclareSymbol{\plus}{symbols}{\mathbin}
198 \fdsy@DeclareSymbol{\times}{symbols}{\mathbin}
199 \fdsy@DeclareSymbol{\dotminus}{symbols}{\mathbin}
200 \fdsy@DeclareSymbol{\minusdot}{symbols}{\mathbin}
201 \fdsy@DeclareSymbol{\div}{symbols}{\mathbin}
202 \fdsy@DeclareSymbol{\minusfdots}{symbols}{\mathbin}
203 \fdsy@DeclareSymbol{\minusrdots}{symbols}{\mathbin}
204 \fdsy@DeclareSymbol{\dotminusdots}{symbols}{\mathrel}
205 \fdsy@DeclareSymbol{\pm}{symbols}{\mathbin}
206 \fdsy@DeclareSymbol{\mp}{symbols}{\mathbin}
207 \fdsy@DeclareSymbol{\dotplus}{symbols}{\mathbin}
208 \fdsy@DeclareSymbol{\plusdot}{symbols}{\mathbin}
209 \fdsy@DeclareSymbol{\dottimes}{symbols}{\mathbin}
210 \fdsy@DeclareSymbol{\timesbar}{symbols}{\mathbin}
211 \fdsy@DeclareSymbol{\divideontimes}{symbols}{\mathbin}
212 \fdsy@DeclareSymbol{\neg}{symbols}{\mathord}
213 \fdsy@DeclareAlias{\lnot}{symbols}{\mathord}
214 \fdsy@DeclareAlias{\minushookdown}{symbols}{\mathbin}
215 \fdsy@DeclareSymbol{\backneg}{symbols}{\mathord}
216 \fdsy@DeclareAlias{\hookdownminus}{symbols}{\mathbin}
217 \fdsy@DeclareAlias{\invneg}{symbols}{\mathord}
218 \fdsy@DeclareAlias{\invnot}{symbols}{\mathord}
219 \fdsy@DeclareSymbol{\intprod}{symbols}{\mathbin}
220 \fdsy@DeclareAlias{\minushookup}{symbols}{\mathbin}
221 \fdsy@DeclareAlias{\turnedneg}{symbols}{\mathord}
222 \fdsy@DeclareAlias{\turnednot}{symbols}{\mathord}
223 \fdsy@DeclareSymbol{\intprodr}{symbols}{\mathbin}
224 \fdsy@DeclareAlias{\hookupminus}{symbols}{\mathbin}
225 \fdsy@DeclareAlias{\turnedbackneg}{symbols}{\mathord}
226 \fdsy@DeclareSymbol{\leftthreetimes}{symbols}{\mathbin}
227 \fdsy@DeclareSymbol{\rightthreetimes}{symbols}{\mathbin}
228 \fdsy@DeclareSymbol{\dtimes}{symbols}{\mathbin}
229 \fdsy@DeclareAlias{\btimes}{symbols}{\mathbin}
230 \fdsy@DeclareSymbol{\rtimes}{symbols}{\mathbin}

```



```

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

```

```

276 \fdsy@DeclareSymbol{\doublesqcap}{symbols}{\mathbin}
277 \fdsy@DeclareAlias{\Sqcap}{symbols}{\mathbin}
278 \fdsy@DeclareSymbol{\sqcupdot}{symbols}{\mathbin}
279 \fdsy@DeclareSymbol{\sqcapdot}{symbols}{\mathbin}
280 \fdsy@DeclareSymbol{\sqcupplus}{symbols}{\mathbin}
281 \fdsy@DeclareSymbol{\sqcapplus}{symbols}{\mathbin}
282 \fdsy@DeclareSymbol{\pullback}{symbols}{\mathbin}
283 \fdsy@DeclareSymbol{\pushout}{symbols}{\mathbin}
284 \fdsy@DeclareSymbol{\smalltriangleright}{symbols}{\mathbin}
285 \fdsy@DeclareSymbol{\smalltriangleup}{symbols}{\mathbin}
286 \fdsy@DeclareSymbol{\smalltriangleleft}{symbols}{\mathbin}
287 \fdsy@DeclareSymbol{\smalltriangledown}{symbols}{\mathbin}
288 \fdsy@DeclareSymbol{\smallblacktriangleright}{symbols}{\mathbin}
289 \fdsy@DeclareSymbol{\smallblacktriangleup}{symbols}{\mathbin}
290 \fdsy@DeclareSymbol{\smallblacktriangleleft}{symbols}{\mathbin}
291 \fdsy@DeclareSymbol{\smallblacktriangledown}{symbols}{\mathbin}
292 \fdsy@DeclareSymbol{\medtriangleright}{symbols}{\mathbin}
293 \fdsy@DeclareAlias{\triangleright}{symbols}{\mathbin}
294 \fdsy@DeclareSymbol{\medtriangleup}{symbols}{\mathbin}
295 \fdsy@DeclareAlias{\triangle}{symbols}{\mathbin}
296 \fdsy@DeclareAlias{\vartriangle}{symbols}{\mathbin}
297 \fdsy@DeclareSymbol{\medtriangleleft}{symbols}{\mathbin}
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318 \fdsy@DeclareAlias{\smbllkcircle}{symbols}{\mathbin}
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320 \fdsy@DeclareAlias{\mdlgwhtcircle}{symbols}{\mathbin}

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321 \fdsy@DeclareSymbol{\medblackcircle}{symbols}{\mathbin}
322 \fdsy@DeclareAlias{\mdlgblkcircle}{symbols}{\mathbin}
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324 \fdsy@DeclareSymbol{\overt}{symbols}{\mathbin}
325 \fdsy@DeclareAlias{\circledvert}{symbols}{\mathbin}
326 \fdsy@DeclareSymbol{\oslash}{symbols}{\mathbin}
327 \fdsy@DeclareSymbol{\obackslash}{symbols}{\mathbin}
328 \fdsy@DeclareAlias{\obslash}{symbols}{\mathbin}
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358 \fdsy@DeclareSymbol{\medblacksquare}{symbols}{\mathbin}
359 \fdsy@DeclareAlias{\mdlgblksquare}{symbols}{\mathbin}
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362 \fdsy@DeclareSymbol{\boxvert}{symbols}{\mathbin}
363 \fdsy@DeclareAlias{\boxbar}{symbols}{\mathbin}
364 \fdsy@DeclareSymbol{\boxslash}{symbols}{\mathbin}
365 \fdsy@DeclareAlias{\boxdiag}{symbols}{\mathbin}

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366 \fdsy@DeclareSymbol{\boxbackslash}{symbols}{\mathbin}
367 \fdsy@DeclareAlias{\boxbslash}{symbols}{\mathbin}
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371 \fdsy@DeclareSymbol{\boxbox}{symbols}{\mathbin}
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384 \fdsy@DeclareAlias{\mdlgwhtdiamond}{symbols}{\mathbin}
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393 \fdsy@DeclareAlias{\diamondbslash}{symbols}{\mathbin}
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395 \fdsy@DeclareSymbol{\diamondtimes}{symbols}{\mathbin}
396 \fdsy@DeclareSymbol{\diamonddot}{symbols}{\mathbin}
397 \fdsy@DeclareAlias{\diamondcdot}{symbols}{\mathbin}
398 \fdsy@DeclareSymbol{\diamondddiamond}{symbols}{\mathbin}
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401 \fdsy@DeclareSymbol{\smallblacklozenge}{symbols}{\mathord}
402 \fdsy@DeclareAlias{\smbblklozenge}{symbols}{\mathord}
403 \fdsy@DeclareSymbol{\medlozenge}{symbols}{\mathord}
404 \fdsy@DeclareAlias{\lozenge}{symbols}{\mathord}
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408 \fdsy@DeclareAlias{\blacklozenge}{symbols}{\mathord}
409 \fdsy@DeclareAlias{\mdlgblklozenge}{symbols}{\mathord}
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411 \fdsy@DeclareSymbol{\lozengeminus}{symbols}{\mathord}
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413 \fdsy@DeclareAlias{\smwhitestar}{symbols}{\mathbin}
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415 \fdsy@DeclareAlias{\star}{symbols}{\mathbin}
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417 \fdsy@DeclareSymbol{\medblackstar}{symbols}{\mathbin}
418 \fdsy@DeclareAlias{\medstar}{symbols}{\mathbin}
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431 \fdsy@DeclareSymbol{\wreath}{symbols}{\mathbin}
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435 \fdsy@DeclareSymbol{\measuredangle}{symbols}{\mathord}
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438 \fdsy@DeclareSymbol{\sphericalangle}{symbols}{\mathord}
439 \fdsy@DeclareSymbol{\sphericalangleup}{symbols}{\mathord}
440 \fdsy@DeclareSymbol{\sphericalangleleft}{symbols}{\mathord}
441 \fdsy@DeclareAlias{\revsphericalangle}{symbols}{\mathord}
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443 \fdsy@DeclareSymbol{\sphericalangledown}{symbols}{\mathord}
444 \fdsy@DeclareSymbol{\rightangle}{symbols}{\mathord}
445 \fdsy@DeclareSymbol{\measuredrightangle}{symbols}{\mathord}
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448 \fdsy@DeclareSymbol{\measuredrightangledot}{symbols}{\mathord}
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450 \fdsy@DeclareSymbol{\prime}{symbols}{\mathord}
451 \fdsy@DeclareSymbol{\backprime}{symbols}{\mathord}
452 \fdsy@DeclareSymbol{\smallprod}{symbols}{\mathop}
453 \fdsy@DeclareSymbol{\smallcoprod}{symbols}{\mathop}
454 \fdsy@DeclareAlias{\amalg}{symbols}{\mathbin}
455 \fdsy@DeclareSymbol{\smallint}{symbols}{\mathop}

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456 \fdsy@DeclareSymbol{\checkmark}{symbols}{\mathord}
457 \fdsy@DeclareSymbol{\lightning}{symbols}{\mathord}
458 \fdsy@DeclareAlias{\downzigzagarrow}{symbols}{\mathord}
459 \fdsy@DeclareSymbol{\diamondsuit}{symbols}{\mathord}
460 \fdsy@DeclareSymbol{\vardiamondsuit}{symbols}{\mathord}
461 \fdsy@DeclareSymbol{\heartsuit}{symbols}{\mathord}
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463 \fdsy@DeclareSymbol{\spadesuit}{symbols}{\mathord}
464 \fdsy@DeclareSymbol{\clubsuit}{symbols}{\mathord}
465 \fdsy@DeclareSymbol{\maltese}{symbols}{\mathord}
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468 \fdsy@DeclareSymbol{\forall}{symbols}{\mathord}
469 \fdsy@DeclareSymbol{\exists}{symbols}{\mathord}
470 \fdsy@DeclareSymbol{\nexists}{symbols}{\mathord}
471 \fdsy@DeclareSymbol{\Finv}{symbols}{\mathord}
472 \fdsy@DeclareSymbol{\Game}{symbols}{\mathord}
473 \fdsy@DeclareSymbol{\complement}{symbols}{\mathord}
474 \fdsy@DeclareSymbol{\flat}{symbols}{\mathord}
475 \fdsy@DeclareSymbol{\natural}{symbols}{\mathord}
476 \fdsy@DeclareSymbol{\sharp}{symbols}{\mathord}
477 \fdsy@DeclareSymbol{\aleph}{symbols}{\mathord}
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479 \fdsy@DeclareSymbol{\gimel}{symbols}{\mathord}
480 \fdsy@DeclareSymbol{\daleth}{symbols}{\mathord}
481 \fdsy@DeclareSymbol{\wp}{symbols}{\mathord}

FdSymbolB: relations
482 \fdsy@setslot{0}
483 \fdsy@DeclareSymbol{\equal}{relations}{\mathrel}
484 \fdsy@DeclareSymbol{\equiv}{relations}{\mathrel}
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499 \fdsy@DeclareSymbol{\doteq}{relations}{\mathrel}

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501 \fdsy@DeclareSymbol{\Doteq}{relations}{\mathrel}
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506 \fdsy@DeclareAlias{\coloneqq}{relations}{\mathrel}
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515 \fdsy@DeclareSymbol{\frownsmile}{relations}{\mathrel}
516 \fdsy@DeclareAlias{\closure}{relations}{\mathrel}
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518 \fdsy@DeclareSymbol{\frowneq}{relations}{\mathrel}
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565 \fdsy@DeclareAlias{\vartriangleleft}{relations}{\mathrel}
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617 \fdsy@DeclareSymbol{\geqslantdot}{relations}{\mathrel}
618 \fdsy@DeclareAlias{\gesdot}{relations}{\mathrel}
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626 \fdsy@DeclareSymbol{\nequiv}{relations}{\mathrel}
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628 \fdsy@DeclareSymbol{\nbacksim}{relations}{\mathrel}
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634 \fdsy@DeclareSymbol{\nbacksimeq}{relations}{\mathrel}

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667 \fdsy@DeclareSymbol{\nless}{relations}{\mathrel}
668 \fdsy@DeclareSymbol{\ngtr}{relations}{\mathrel}
669 \fdsy@DeclareSymbol{\nleq}{relations}{\mathrel}
670 \fdsy@DeclareSymbol{\ngeq}{relations}{\mathrel}
671 \fdsy@DeclareSymbol{\nleqslant}{relations}{\mathrel}
672 \fdsy@DeclareSymbol{\ngeqslant}{relations}{\mathrel}
673 \fdsy@DeclareSymbol{\nleqq}{relations}{\mathrel}
674 \fdsy@DeclareSymbol{\ngeqq}{relations}{\mathrel}
675 \fdsy@DeclareSymbol{\nlesssim}{relations}{\mathrel}
676 \fdsy@DeclareSymbol{\ngtrsim}{relations}{\mathrel}
677 \fdsy@DeclareSymbol{\nlessapprox}{relations}{\mathrel}
678 \fdsy@DeclareSymbol{\ngtrapprox}{relations}{\mathrel}
679 \fdsy@DeclareSymbol{\nlessgtr}{relations}{\mathrel}

```

```

680 \fdsy@DeclareSymbol{\ngtrless}{relations}{\mathrel}
681 \fdsy@DeclareSymbol{\nlesseqgtr}{relations}{\mathrel}
682 \fdsy@DeclareSymbol{\ngtreqlless}{relations}{\mathrel}
683 \fdsy@DeclareSymbol{\nlesseqqgtr}{relations}{\mathrel}
684 \fdsy@DeclareSymbol{\ngtreqqless}{relations}{\mathrel}
685 \fdsy@DeclareSymbol{\nlesseqslantgtr}{relations}{\mathrel}
686 \fdsy@DeclareAlias{\nlesg}{relations}{\mathrel}
687 \fdsy@DeclareAlias{\nlesseqgtrslant}{relations}{\mathrel}
688 \fdsy@DeclareSymbol{\ngtreqslantless}{relations}{\mathrel}
689 \fdsy@DeclareAlias{\ngesl}{relations}{\mathrel}
690 \fdsy@DeclareAlias{\ngtreqllessslant}{relations}{\mathrel}
691 \fdsy@DeclareSymbol{\nll}{relations}{\mathrel}
692 \fdsy@DeclareSymbol{\ngg}{relations}{\mathrel}
693 \fdsy@DeclareSymbol{\nlll}{relations}{\mathrel}
694 \fdsy@DeclareSymbol{\nggg}{relations}{\mathrel}
695 \fdsy@DeclareSymbol{\nlessclosed}{relations}{\mathrel}
696 \fdsy@DeclareAlias{\ntriangleleft}{relations}{\mathrel}
697 \fdsy@DeclareSymbol{\ngtrclosed}{relations}{\mathrel}
698 \fdsy@DeclareAlias{\ntriangleright}{relations}{\mathrel}
699 \fdsy@DeclareSymbol{\nleqclosed}{relations}{\mathrel}
700 \fdsy@DeclareAlias{\ntrianglelefteq}{relations}{\mathrel}
701 \fdsy@DeclareSymbol{\ngeqclosed}{relations}{\mathrel}
702 \fdsy@DeclareAlias{\ntrianglerighteq}{relations}{\mathrel}
703 \fdsy@DeclareSymbol{\nlesscc}{relations}{\mathrel}
704 \fdsy@DeclareAlias{\nltcc}{relations}{\mathrel}
705 \fdsy@DeclareSymbol{\ngtrcc}{relations}{\mathrel}
706 \fdsy@DeclareAlias{\ngtcc}{relations}{\mathrel}
707 \fdsy@DeclareSymbol{\nleqslcc}{relations}{\mathrel}
708 \fdsy@DeclareAlias{\nlescc}{relations}{\mathrel}
709 \fdsy@DeclareSymbol{\ngeqslcc}{relations}{\mathrel}
710 \fdsy@DeclareAlias{\ngescc}{relations}{\mathrel}
711 \fdsy@DeclareSymbol{\nsssubset}{relations}{\mathrel}
712 \fdsy@DeclareSymbol{\nsssupset}{relations}{\mathrel}
713 \fdsy@DeclareSymbol{\nsssubseteq}{relations}{\mathrel}
714 \fdsy@DeclareSymbol{\nsssupseteq}{relations}{\mathrel}
715 \fdsy@DeclareSymbol{\nsssubseteqq}{relations}{\mathrel}
716 \fdsy@DeclareSymbol{\nsssupseteqq}{relations}{\mathrel}
717 \fdsy@DeclareSymbol{\nSsubset}{relations}{\mathrel}
718 \fdsy@DeclareSymbol{\nSsupset}{relations}{\mathrel}
719 \fdsy@DeclareSymbol{\nsubset}{relations}{\mathrel}
720 \fdsy@DeclareSymbol{\nsupset}{relations}{\mathrel}
721 \fdsy@DeclareSymbol{\nsubseteq}{relations}{\mathrel}
722 \fdsy@DeclareSymbol{\nsupseteq}{relations}{\mathrel}
723 \fdsy@DeclareSymbol{\nsubseteqq}{relations}{\mathrel}
724 \fdsy@DeclareSymbol{\nsupseteqq}{relations}{\mathrel}

```

```

725 \fdsy@DeclareSymbol{\nSubset}{relations}{\mathrel}
726 \fdsy@DeclareSymbol{\nSupset}{relations}{\mathrel}
727 \fdsy@DeclareSymbol{\nprec}{relations}{\mathrel}
728 \fdsy@DeclareSymbol{\nsucc}{relations}{\mathrel}
729 \fdsy@DeclareSymbol{\npreceq}{relations}{\mathrel}
730 \fdsy@DeclareSymbol{\nsucceq}{relations}{\mathrel}
731 \fdsy@DeclareSymbol{\npreccurlyeq}{relations}{\mathrel}
732 \fdsy@DeclareSymbol{\nsucccurlyeq}{relations}{\mathrel}
733 \fdsy@DeclareSymbol{\npreceqq}{relations}{\mathrel}
734 \fdsy@DeclareSymbol{\nsucceqq}{relations}{\mathrel}
735 \fdsy@DeclareSymbol{\nprecsim}{relations}{\mathrel}
736 \fdsy@DeclareSymbol{\nsuccsim}{relations}{\mathrel}
737 \fdsy@DeclareSymbol{\nprecapprox}{relations}{\mathrel}
738 \fdsy@DeclareSymbol{\nsuccapprox}{relations}{\mathrel}
739 \fdsy@DeclareSymbol{\nlessdot}{relations}{\mathrel}
740 \fdsy@DeclareSymbol{\ngtrdot}{relations}{\mathrel}
741 \fdsy@DeclareSymbol{\nleqdot}{relations}{\mathrel}
742 \fdsy@DeclareSymbol{\ngeqdot}{relations}{\mathrel}
743 \fdsy@DeclareSymbol{\nleqslantdot}{relations}{\mathrel}
744 \fdsy@DeclareAlias{\nlesdot}{relations}{\mathrel}
745 \fdsy@DeclareSymbol{\ngeqslantdot}{relations}{\mathrel}
746 \fdsy@DeclareAlias{\ngesdot}{relations}{\mathrel}
747 \fdsy@DeclareSymbol{\neqslantless}{relations}{\mathrel}
748 \fdsy@DeclareSymbol{\neqslantgtr}{relations}{\mathrel}
749 \fdsy@DeclareSymbol{\ncurlyeqprec}{relations}{\mathrel}
750 \fdsy@DeclareSymbol{\ncurlyeqsucc}{relations}{\mathrel}
751 \fdsy@DeclareSymbol{\simneqq}{relations}{\mathrel}
752 \fdsy@DeclareSymbol{\backsimneqq}{relations}{\mathrel}
753 \fdsy@DeclareSymbol{\lneq}{relations}{\mathrel}
754 \fdsy@DeclareSymbol{\gneq}{relations}{\mathrel}
755 \fdsy@DeclareSymbol{\lneqq}{relations}{\mathrel}
756 \fdsy@DeclareAlias{\lvertneqq}{relations}{\mathrel}
757 \fdsy@DeclareSymbol{\gneqq}{relations}{\mathrel}
758 \fdsy@DeclareAlias{\gvertneqq}{relations}{\mathrel}
759 \fdsy@DeclareSymbol{\lnsim}{relations}{\mathrel}
760 \fdsy@DeclareSymbol{\gnsim}{relations}{\mathrel}
761 \fdsy@DeclareSymbol{\lnapprox}{relations}{\mathrel}
762 \fdsy@DeclareSymbol{\gnapprox}{relations}{\mathrel}
763 \fdsy@DeclareSymbol{\sqsubsetneq}{relations}{\mathrel}
764 \fdsy@DeclareSymbol{\sqsupsetneq}{relations}{\mathrel}
765 \fdsy@DeclareSymbol{\sqsubsetneqq}{relations}{\mathrel}
766 \fdsy@DeclareSymbol{\sqsupsetneqq}{relations}{\mathrel}
767 \fdsy@DeclareSymbol{\subsetneq}{relations}{\mathrel}
768 \fdsy@DeclareAlias{\varsubsetneq}{relations}{\mathrel}
769 \fdsy@DeclareSymbol{\supsetneq}{relations}{\mathrel}

```

```

770 \fdsy@DeclareAlias{\varsupsetneq}{relations}{\mathrel}
771 \fdsy@DeclareSymbol{\subsetneqq}{relations}{\mathrel}
772 \fdsy@DeclareAlias{\varsubsetneqq}{relations}{\mathrel}
773 \fdsy@DeclareSymbol{\supsetneqq}{relations}{\mathrel}
774 \fdsy@DeclareAlias{\varsupsetneqq}{relations}{\mathrel}
775 \fdsy@DeclareSymbol{\precneq}{relations}{\mathrel}
776 \fdsy@DeclareSymbol{\succneq}{relations}{\mathrel}
777 \fdsy@DeclareSymbol{\precneqq}{relations}{\mathrel}
778 \fdsy@DeclareSymbol{\succneqq}{relations}{\mathrel}
779 \fdsy@DeclareSymbol{\precnsim}{relations}{\mathrel}
780 \fdsy@DeclareSymbol{\succnsim}{relations}{\mathrel}
781 \fdsy@DeclareSymbol{\precnapprox}{relations}{\mathrel}
782 \fdsy@DeclareSymbol{\succnapprox}{relations}{\mathrel}

```

FdSymbolC: arrows

```

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

```

```

814 \fdsy@DeclareSymbol{\twoheadnearrow}{arrows}{\mathrel}
815 \fdsy@DeclareSymbol{\twoheadnwarrow}{arrows}{\mathrel}
816 \fdsy@DeclareSymbol{\twoheadswarrow}{arrows}{\mathrel}
817 \fdsy@DeclareSymbol{\twoheadsearrow}{arrows}{\mathrel}
818 \fdsy@DeclareSymbol{\rightarrowtail}{arrows}{\mathrel}
819 \fdsy@DeclareSymbol{\uparrowtail}{arrows}{\mathrel}
820 \fdsy@DeclareSymbol{\leftarrowtail}{arrows}{\mathrel}
821 \fdsy@DeclareSymbol{\downarrowtail}{arrows}{\mathrel}
822 \fdsy@DeclareSymbol{\nearrowtail}{arrows}{\mathrel}
823 \fdsy@DeclareSymbol{\nwarrowtail}{arrows}{\mathrel}
824 \fdsy@DeclareSymbol{\swarrowtail}{arrows}{\mathrel}
825 \fdsy@DeclareSymbol{\searrowtail}{arrows}{\mathrel}
826 \fdsy@DeclareSymbol{\rightmapsto}{arrows}{\mathrel}
827 \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
828 \fdsy@DeclareSymbol{\upmapsto}{arrows}{\mathrel}
829 \fdsy@DeclareAlias{\mapsup}{arrows}{\mathrel}
830 \fdsy@DeclareSymbol{\leftmapsto}{arrows}{\mathrel}
831 \fdsy@DeclareAlias{\mapsfrom}{arrows}{\mathrel}
832 \fdsy@DeclareSymbol{\downmapsto}{arrows}{\mathrel}
833 \fdsy@DeclareAlias{\mapsdown}{arrows}{\mathrel}
834 \fdsy@DeclareSymbol{\Rightmapsto}{arrows}{\mathrel}
835 \fdsy@DeclareAlias{\Mapsto}{arrows}{\mathrel}
836 \fdsy@DeclareSymbol{\Upmapsto}{arrows}{\mathrel}
837 \fdsy@DeclareAlias{\Mapsup}{arrows}{\mathrel}
838 \fdsy@DeclareSymbol{\Leftmapsto}{arrows}{\mathrel}
839 \fdsy@DeclareAlias{\Mapsfrom}{arrows}{\mathrel}
840 \fdsy@DeclareSymbol{\Downmapsto}{arrows}{\mathrel}
841 \fdsy@DeclareAlias{\Mapsdown}{arrows}{\mathrel}
842 \fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
843 \fdsy@DeclareAlias{\lhookrightarrow}{arrows}{\mathrel}
844 \fdsy@DeclareSymbol{\hookuparrow}{arrows}{\mathrel}
845 \fdsy@DeclareAlias{\lhookuparrow}{arrows}{\mathrel}
846 \fdsy@DeclareSymbol{\varhookleftarrow}{arrows}{\mathrel}
847 \fdsy@DeclareAlias{\lhookleftarrow}{arrows}{\mathrel}
848 \fdsy@DeclareSymbol{\varhookrightarrow}{arrows}{\mathrel}
849 \fdsy@DeclareAlias{\lhookrightarrow}{arrows}{\mathrel}
850 \fdsy@DeclareSymbol{\varhooknearrow}{arrows}{\mathrel}
851 \fdsy@DeclareAlias{\lhooknearrow}{arrows}{\mathrel}
852 \fdsy@DeclareSymbol{\hooknwarrow}{arrows}{\mathrel}
853 \fdsy@DeclareAlias{\hknwarrow}{arrows}{\mathrel}
854 \fdsy@DeclareAlias{\lhooknwarrow}{arrows}{\mathrel}
855 \fdsy@DeclareSymbol{\varhookswarrow}{arrows}{\mathrel}
856 \fdsy@DeclareAlias{\lhookswarrow}{arrows}{\mathrel}
857 \fdsy@DeclareSymbol{\hooksearrow}{arrows}{\mathrel}
858 \fdsy@DeclareAlias{\hksearrow}{arrows}{\mathrel}

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859 \fdsy@DeclareAlias{\lhooksearrow}{arrows}{\mathrel}
860 \fdsy@DeclareSymbol{\varhookrightarrow}{arrows}{\mathrel}
861 \fdsy@DeclareAlias{\rhookrightarrow}{arrows}{\mathrel}
862 \fdsy@DeclareSymbol{\varhookuparrow}{arrows}{\mathrel}
863 \fdsy@DeclareAlias{\rhookuparrow}{arrows}{\mathrel}
864 \fdsy@DeclareSymbol{\hookleftarrow}{arrows}{\mathrel}
865 \fdsy@DeclareAlias{\rhookleftarrow}{arrows}{\mathrel}
866 \fdsy@DeclareSymbol{\hookdownarrow}{arrows}{\mathrel}
867 \fdsy@DeclareAlias{\rhookdownarrow}{arrows}{\mathrel}
868 \fdsy@DeclareSymbol{\hooknearrow}{arrows}{\mathrel}
869 \fdsy@DeclareAlias{\hknearrow}{arrows}{\mathrel}
870 \fdsy@DeclareAlias{\rhooknearrow}{arrows}{\mathrel}
871 \fdsy@DeclareSymbol{\varhooknwarrow}{arrows}{\mathrel}
872 \fdsy@DeclareAlias{\rhooknwarrow}{arrows}{\mathrel}
873 \fdsy@DeclareSymbol{\hookswarrow}{arrows}{\mathrel}
874 \fdsy@DeclareAlias{\hkswarrow}{arrows}{\mathrel}
875 \fdsy@DeclareAlias{\rhookswarrow}{arrows}{\mathrel}
876 \fdsy@DeclareSymbol{\varhooksearrow}{arrows}{\mathrel}
877 \fdsy@DeclareAlias{\rhooksearrow}{arrows}{\mathrel}
878 \fdsy@DeclareSymbol{\rightharpoonup}{arrows}{\mathrel}
879 \fdsy@DeclareSymbol{\upharpoonleft}{arrows}{\mathrel}
880 \fdsy@DeclareSymbol{\leftharpoontdown}{arrows}{\mathrel}
881 \fdsy@DeclareSymbol{\downharpoonright}{arrows}{\mathrel}
882 \fdsy@DeclareSymbol{\neharpoonnw}{arrows}{\mathrel}
883 \fdsy@DeclareSymbol{\nwharpoonsw}{arrows}{\mathrel}
884 \fdsy@DeclareSymbol{\swharpoonse}{arrows}{\mathrel}
885 \fdsy@DeclareSymbol{\seharpoonne}{arrows}{\mathrel}
886 \fdsy@DeclareSymbol{\rightharpoontdown}{arrows}{\mathrel}
887 \fdsy@DeclareSymbol{\upharpoonright}{arrows}{\mathrel}
888 \fdsy@DeclareAlias{\restriction}{arrows}{\mathrel}
889 \fdsy@DeclareSymbol{\leftharpoonup}{arrows}{\mathrel}
890 \fdsy@DeclareSymbol{\downharpoonleft}{arrows}{\mathrel}
891 \fdsy@DeclareSymbol{\neharpoonse}{arrows}{\mathrel}
892 \fdsy@DeclareSymbol{\nwharpoonne}{arrows}{\mathrel}
893 \fdsy@DeclareSymbol{\swharpoonnw}{arrows}{\mathrel}
894 \fdsy@DeclareSymbol{\seharpoonsw}{arrows}{\mathrel}
895 \fdsy@DeclareSymbol{\leftrightharpoonupdown}{arrows}{\mathrel}
896 \fdsy@DeclareSymbol{\updownharpoonleftright}{arrows}{\mathrel}
897 \fdsy@DeclareSymbol{\neswharpoonnwse}{arrows}{\mathrel}
898 \fdsy@DeclareSymbol{\nwseharpoonnesw}{arrows}{\mathrel}
899 \fdsy@DeclareSymbol{\leftrightharpoonupdown}{arrows}{\mathrel}
900 \fdsy@DeclareSymbol{\updownharpoonrightleft}{arrows}{\mathrel}
901 \fdsy@DeclareSymbol{\neswharpoonsenw}{arrows}{\mathrel}
902 \fdsy@DeclareSymbol{\nwseharpoonswne}{arrows}{\mathrel}
903 \fdsy@DeclareSymbol{\rightleftharpoons}{arrows}{\mathrel}

```

```

904 \fdsy@DeclareSymbol{\updownharpoons}{arrows}{\mathrel}
905 \fdsy@DeclareAlias{\updownharpoonsleftright}{arrows}{\mathrel}
906 \fdsy@DeclareSymbol{\neswharpoons}{arrows}{\mathrel}
907 \fdsy@DeclareSymbol{\senwharpoons}{arrows}{\mathrel}
908 \fdsy@DeclareSymbol{\leftrightharpoons}{arrows}{\mathrel}
909 \fdsy@DeclareSymbol{\downupharpoons}{arrows}{\mathrel}
910 \fdsy@DeclareAlias{\downupharpoonsleftright}{arrows}{\mathrel}
911 \fdsy@DeclareSymbol{\swneharpoons}{arrows}{\mathrel}
912 \fdsy@DeclareSymbol{\nwseharpoons}{arrows}{\mathrel}
913 \fdsy@DeclareSymbol{\rightbkarrow}{arrows}{\mathrel}
914 \fdsy@DeclareAlias{\dasharrow}{arrows}{\mathrel}
915 \fdsy@DeclareAlias{\dashrightarrow}{arrows}{\mathrel}
916 \fdsy@DeclareSymbol{\upbkarrow}{arrows}{\mathrel}
917 \fdsy@DeclareSymbol{\leftbkarrow}{arrows}{\mathrel}
918 \fdsy@DeclareAlias{\dashleftarrow}{arrows}{\mathrel}
919 \fdsy@DeclareSymbol{\downbkarrow}{arrows}{\mathrel}
920 \fdsy@DeclareSymbol{\nebkarrow}{arrows}{\mathrel}
921 \fdsy@DeclareSymbol{\nwbkarrow}{arrows}{\mathrel}
922 \fdsy@DeclareSymbol{\swbkarrow}{arrows}{\mathrel}
923 \fdsy@DeclareSymbol{\sebkarrow}{arrows}{\mathrel}
924 \fdsy@DeclareSymbol{\rightspoon}{arrows}{\mathrel}
925 \fdsy@DeclareAlias{\multimap}{arrows}{\mathrel}
926 \fdsy@DeclareSymbol{\upspoon}{arrows}{\mathrel}
927 \fdsy@DeclareAlias{\circmid}{arrows}{\mathrel}
928 \fdsy@DeclareSymbol{\leftspoon}{arrows}{\mathrel}
929 \fdsy@DeclareAlias{\multimapinv}{arrows}{\mathrel}
930 \fdsy@DeclareSymbol{\downspoon}{arrows}{\mathrel}
931 \fdsy@DeclareAlias{\midcir}{arrows}{\mathrel}
932 \fdsy@DeclareSymbol{\rightblackspoon}{arrows}{\mathrel}
933 \fdsy@DeclareSymbol{\upblackspoon}{arrows}{\mathrel}
934 \fdsy@DeclareSymbol{\leftblackspoon}{arrows}{\mathrel}
935 \fdsy@DeclareSymbol{\downblackspoon}{arrows}{\mathrel}
936 \fdsy@DeclareSymbol{\leftrightspoon}{arrows}{\mathrel}
937 \fdsy@DeclareAlias{\dualmap}{arrows}{\mathrel}
938 \fdsy@DeclareSymbol{\leftrightblackspoon}{arrows}{\mathrel}
939 \fdsy@DeclareSymbol{\blackwhitespoon}{arrows}{\mathrel}
940 \fdsy@DeclareAlias{\imageof}{arrows}{\mathrel}
941 \fdsy@DeclareSymbol{\whiteblackspoon}{arrows}{\mathrel}
942 \fdsy@DeclareAlias{\origof}{arrows}{\mathrel}
943 \fdsy@DeclareSymbol{\rightpitchfork}{arrows}{\mathrel}
944 \fdsy@DeclareSymbol{\uppitchfork}{arrows}{\mathrel}
945 \fdsy@DeclareAlias{\pitchfork}{arrows}{\mathrel}
946 \fdsy@DeclareSymbol{\leftpitchfork}{arrows}{\mathrel}
947 \fdsy@DeclareSymbol{\downpitchfork}{arrows}{\mathrel}
948 \fdsy@DeclareSymbol{\rightrightarrows}{arrows}{\mathrel}

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949 \fdsy@DeclareSymbol{\upuparrows}{arrows}{\mathrel}
950 \fdsy@DeclareSymbol{\leftleftarrows}{arrows}{\mathrel}
951 \fdsy@DeclareSymbol{\downdownarrows}{arrows}{\mathrel}
952 \fdsy@DeclareSymbol{\nenearrows}{arrows}{\mathrel}
953 \fdsy@DeclareSymbol{\nwnwarrows}{arrows}{\mathrel}
954 \fdsy@DeclareSymbol{\swswarrows}{arrows}{\mathrel}
955 \fdsy@DeclareSymbol{\sesearrows}{arrows}{\mathrel}
956 \fdsy@DeclareSymbol{\rightleftarrows}{arrows}{\mathrel}
957 \fdsy@DeclareSymbol{\updownarrows}{arrows}{\mathrel}
958 \fdsy@DeclareSymbol{\neswarrows}{arrows}{\mathrel}
959 \fdsy@DeclareSymbol{\nwsearrows}{arrows}{\mathrel}
960 \fdsy@DeclareSymbol{\leftrightharpoons}{arrows}{\mathrel}
961 \fdsy@DeclareSymbol{\downuparrows}{arrows}{\mathrel}
962 \fdsy@DeclareSymbol{\swnearrows}{arrows}{\mathrel}
963 \fdsy@DeclareSymbol{\senwarrows}{arrows}{\mathrel}
964 \fdsy@DeclareSymbol{\rightwvearrow}{arrows}{\mathrel}
965 \fdsy@DeclareAlias{\leadsto}{arrows}{\mathrel}
966 \fdsy@DeclareAlias{\rightsquigarrow}{arrows}{\mathrel}
967 \fdsy@DeclareAlias{\rightcurvedarrow}{arrows}{\mathrel}
968 \fdsy@DeclareAlias{\rightlsquigarrow}{arrows}{\mathrel}
969 \fdsy@DeclareSymbol{\varupwvearrow}{arrows}{\mathrel}
970 \fdsy@DeclareAlias{\uplsquigarrow}{arrows}{\mathrel}
971 \fdsy@DeclareSymbol{\varleftwvearrow}{arrows}{\mathrel}
972 \fdsy@DeclareAlias{\leftlsquigarrow}{arrows}{\mathrel}
973 \fdsy@DeclareSymbol{\downwvearrow}{arrows}{\mathrel}
974 \fdsy@DeclareAlias{\downlsquigarrow}{arrows}{\mathrel}
975 \fdsy@DeclareSymbol{\varrightwvearrow}{arrows}{\mathrel}
976 \fdsy@DeclareAlias{\rightrsquigarrow}{arrows}{\mathrel}
977 \fdsy@DeclareSymbol{\upwvearrow}{arrows}{\mathrel}
978 \fdsy@DeclareAlias{\uprsquigarrow}{arrows}{\mathrel}
979 \fdsy@DeclareSymbol{\leftwvearrow}{arrows}{\mathrel}
980 \fdsy@DeclareAlias{\leftsquigarrow}{arrows}{\mathrel}
981 \fdsy@DeclareAlias{\leftcurvedarrow}{arrows}{\mathrel}
982 \fdsy@DeclareAlias{\leftrsquigarrow}{arrows}{\mathrel}
983 \fdsy@DeclareSymbol{\vardownwvearrow}{arrows}{\mathrel}
984 \fdsy@DeclareAlias{\downrsquigarrow}{arrows}{\mathrel}
985 \fdsy@DeclareSymbol{\leftrightwvearrow}{arrows}{\mathrel}
986 \fdsy@DeclareAlias{\leftrightsquigarrow}{arrows}{\mathrel}
987 \fdsy@DeclareSymbol{\updownwvearrow}{arrows}{\mathrel}
988 \fdsy@DeclareAlias{\updownsquigarrow}{arrows}{\mathrel}
989 \fdsy@DeclareSymbol{\varleftrightwvearrow}{arrows}{\mathrel}
990 \fdsy@DeclareAlias{\rightleftsquigarrow}{arrows}{\mathrel}
991 \fdsy@DeclareSymbol{\varupdownwvearrow}{arrows}{\mathrel}
992 \fdsy@DeclareAlias{\downupsquigarrow}{arrows}{\mathrel}
993 \fdsy@DeclareSymbol{\cwoverarccarrow}{arrows}{\mathrel}

```

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994 \fdsy@DeclareAlias{\curvearrowright}{arrows}{\mathrel}
995 \fdsy@DeclareAlias{\rightlcurvedarrow}{arrows}{\mathrel}
996 \fdsy@DeclareSymbol{\cwleftarccarrow}{arrows}{\mathrel}
997 \fdsy@DeclareAlias{\uplcurvedarrow}{arrows}{\mathrel}
998 \fdsy@DeclareSymbol{\cwunderarccarrow}{arrows}{\mathrel}
999 \fdsy@DeclareAlias{\leftlcurvedarrow}{arrows}{\mathrel}
1000 \fdsy@DeclareSymbol{\cwrightarccarrow}{arrows}{\mathrel}
1001 \fdsy@DeclareAlias{\downlcurvedarrow}{arrows}{\mathrel}
1002 \fdsy@DeclareSymbol{\cwnwarccarrow}{arrows}{\mathrel}
1003 \fdsy@DeclareAlias{\rightupcurvedarrow}{arrows}{\mathrel}
1004 \fdsy@DeclareAlias{\nelcurvedarrow}{arrows}{\mathrel}
1005 \fdsy@DeclareSymbol{\cswwarccarrow}{arrows}{\mathrel}
1006 \fdsy@DeclareAlias{\upleftcurvedarrow}{arrows}{\mathrel}
1007 \fdsy@DeclareAlias{\nwlcurearrow}{arrows}{\mathrel}
1008 \fdsy@DeclareSymbol{\cwsearccarrow}{arrows}{\mathrel}
1009 \fdsy@DeclareAlias{\leftdowncurvedarrow}{arrows}{\mathrel}
1010 \fdsy@DeclareAlias{\swlcurearrow}{arrows}{\mathrel}
1011 \fdsy@DeclareSymbol{\cwnearccarrow}{arrows}{\mathrel}
1012 \fdsy@DeclareAlias{\downrightcurvedarrow}{arrows}{\mathrel}
1013 \fdsy@DeclareAlias{\selcurvedarrow}{arrows}{\mathrel}
1014 \fdsy@DeclareSymbol{\acwunderarccarrow}{arrows}{\mathrel}
1015 \fdsy@DeclareAlias{\rightrcurearrow}{arrows}{\mathrel}
1016 \fdsy@DeclareSymbol{\acwrightarccarrow}{arrows}{\mathrel}
1017 \fdsy@DeclareAlias{\uprcurearrow}{arrows}{\mathrel}
1018 \fdsy@DeclareSymbol{\acwoverarccarrow}{arrows}{\mathrel}
1019 \fdsy@DeclareAlias{\curvearrowleft}{arrows}{\mathrel}
1020 \fdsy@DeclareAlias{\lefttrcurvedarrow}{arrows}{\mathrel}
1021 \fdsy@DeclareSymbol{\acwleftarccarrow}{arrows}{\mathrel}
1022 \fdsy@DeclareAlias{\downrcurearrow}{arrows}{\mathrel}
1023 \fdsy@DeclareSymbol{\acwsearccarrow}{arrows}{\mathrel}
1024 \fdsy@DeclareAlias{\uprightcurvedarrow}{arrows}{\mathrel}
1025 \fdsy@DeclareAlias{\nercurvedarrow}{arrows}{\mathrel}
1026 \fdsy@DeclareSymbol{\acwnearccarrow}{arrows}{\mathrel}
1027 \fdsy@DeclareAlias{\leftupcurvedarrow}{arrows}{\mathrel}
1028 \fdsy@DeclareAlias{\nwrcurearrow}{arrows}{\mathrel}
1029 \fdsy@DeclareSymbol{\acwnwarccarrow}{arrows}{\mathrel}
1030 \fdsy@DeclareAlias{\downleftcurvedarrow}{arrows}{\mathrel}
1031 \fdsy@DeclareAlias{\swrcurearrow}{arrows}{\mathrel}
1032 \fdsy@DeclareSymbol{\acswwarccarrow}{arrows}{\mathrel}
1033 \fdsy@DeclareAlias{\rightdowncurvedarrow}{arrows}{\mathrel}
1034 \fdsy@DeclareAlias{\sercurvedarrow}{arrows}{\mathrel}
1035 \fdsy@DeclareSymbol{\bdoverarccarrow}{arrows}{\mathrel}
1036 \fdsy@DeclareAlias{\leftrightcurvedarrow}{arrows}{\mathrel}
1037 \fdsy@DeclareSymbol{\bdleftarccarrow}{arrows}{\mathrel}
1038 \fdsy@DeclareAlias{\updowncurvedarrow}{arrows}{\mathrel}

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1039 \fdsy@DeclareSymbol{\bdunderarcarrow}{arrows}{\mathrel}
1040 \fdsy@DeclareAlias{\rightleftcurvearrow}{arrows}{\mathrel}
1041 \fdsy@DeclareSymbol{\bdrightarcarrow}{arrows}{\mathrel}
1042 \fdsy@DeclareAlias{\downupcurvearrow}{arrows}{\mathrel}
1043 \fdsy@DeclareSymbol{\bdnwarcarrow}{arrows}{\mathrel}
1044 \fdsy@DeclareAlias{\neswcurvearrow}{arrows}{\mathrel}
1045 \fdsy@DeclareSymbol{\bdswarcarrow}{arrows}{\mathrel}
1046 \fdsy@DeclareAlias{\nwsecurvearrow}{arrows}{\mathrel}
1047 \fdsy@DeclareSymbol{\bdsearcarrow}{arrows}{\mathrel}
1048 \fdsy@DeclareAlias{\swnecurvearrow}{arrows}{\mathrel}
1049 \fdsy@DeclareSymbol{\bdnearcarrow}{arrows}{\mathrel}
1050 \fdsy@DeclareAlias{\senwcurvearrow}{arrows}{\mathrel}
1051 \fdsy@DeclareSymbol{\leftfootline}{arrows}{\mathrel}
1052 \fdsy@DeclareSymbol{\rightfootline}{arrows}{\mathrel}
1053 \fdsy@DeclareSymbol{\acwcirculararrowup}{arrows}{\mathrel}
1054 \fdsy@DeclareSymbol{\acwcirculararrowleft}{arrows}{\mathrel}
1055 \fdsy@DeclareAlias{\circulararrowleft}{arrows}{\mathrel}
1056 \fdsy@DeclareAlias{\acwopencirculararrow}{arrows}{\mathrel}
1057 \fdsy@DeclareSymbol{\acwcirculararrowdown}{arrows}{\mathrel}
1058 \fdsy@DeclareAlias{\acwgapcirculararrow}{arrows}{\mathrel}
1059 \fdsy@DeclareSymbol{\acwcirculararrowright}{arrows}{\mathrel}
1060 \fdsy@DeclareSymbol{\cwcirculararrowdown}{arrows}{\mathrel}
1061 \fdsy@DeclareAlias{\cwgapcirculararrow}{arrows}{\mathrel}
1062 \fdsy@DeclareSymbol{\cwcirculararrowright}{arrows}{\mathrel}
1063 \fdsy@DeclareAlias{\circulararrowright}{arrows}{\mathrel}
1064 \fdsy@DeclareAlias{\cwopencirculararrow}{arrows}{\mathrel}
1065 \fdsy@DeclareSymbol{\cwcirculararrowup}{arrows}{\mathrel}
1066 \fdsy@DeclareSymbol{\cwcirculararrowleft}{arrows}{\mathrel}
1067 \fdsy@DeclareSymbol{\Rrightarrow}{arrows}{\mathrel}
1068 \fdsy@DeclareSymbol{\Uparrow}{arrows}{\mathrel}
1069 \fdsy@DeclareSymbol{\Lleftarrow}{arrows}{\mathrel}
1070 \fdsy@DeclareSymbol{\Ddownarrow}{arrows}{\mathrel}
1071 \fdsy@DeclareSymbol{\longrightarrow}{arrows}{\mathrel}
1072 \fdsy@DeclareSymbol{\longleftarrow}{arrows}{\mathrel}
1073 \fdsy@DeclareSymbol{\Longrightarrow}{arrows}{\mathrel}
1074 \fdsy@DeclareSymbol{\Longleftarrow}{arrows}{\mathrel}
1075 \fdsy@DeclareSymbol{\longlefttrightarrow}{arrows}{\mathrel}
1076 \fdsy@DeclareSymbol{\Longlefttrightarrow}{arrows}{\mathrel}
1077 \fdsy@DeclareSymbol{\longmapsto}{arrows}{\mathrel}
1078 \fdsy@DeclareSymbol{\longmapsfrom}{arrows}{\mathrel}
1079 \fdsy@DeclareSymbol{\Longmapsto}{arrows}{\mathrel}
1080 \fdsy@DeclareSymbol{\Longmapsfrom}{arrows}{\mathrel}
1081 \fdsy@DeclareSymbol{\longrightwvearrow}{arrows}{\mathrel}
1082 \fdsy@DeclareAlias{\longleadsto}{arrows}{\mathrel}
1083 \fdsy@DeclareAlias{\longrightsquigarrow}{arrows}{\mathrel}

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1084 \fdsy@DeclareSymbol{\longleftwvearrow}{arrows}{\mathrel}
1085 \fdsy@DeclareAlias{\longleftsquigarrow}{arrows}{\mathrel}
1086 \fdsy@DeclareSymbol{\longleftfootline}{arrows}{\mathrel}
1087 \fdsy@DeclareAlias{\vlongdash}{arrows}{\mathrel}
1088 \fdsy@DeclareSymbol{\longrightfootline}{arrows}{\mathrel}
1089 \fdsy@DeclareAlias{\longdashv}{arrows}{\mathrel}
1090 \fdsy@DeclareSymbol{\Lsh}{arrows}{\mathrel}
1091 \fdsy@DeclareSymbol{\Rsh}{arrows}{\mathrel}
1092 \fdsy@DeclareSymbol{\Ldsh}{arrows}{\mathrel}
1093 \fdsy@DeclareSymbol{\Rdsh}{arrows}{\mathrel}
1094 \fdsy@DeclareSymbol{\looparrowright}{arrows}{\mathrel}
1095 \fdsy@DeclareSymbol{\looparrowleft}{arrows}{\mathrel}
1096 \fdsy@setslot{224}
1097 \fdsy@DeclareSymbol{\rightvdash}{arrows}{\mathrel}
1098 \fdsy@DeclareAlias{\vdash}{arrows}{\mathrel}
1099 \fdsy@DeclareSymbol{\upvdash}{arrows}{\mathrel}
1100 \fdsy@DeclareAlias{\perp}{arrows}{\mathrel}
1101 \fdsy@DeclareAlias{\bot}{arrows}{\mathord}
1102 \fdsy@DeclareSymbol{\leftvdash}{arrows}{\mathrel}
1103 \fdsy@DeclareAlias{\dashv}{arrows}{\mathrel}
1104 \fdsy@DeclareSymbol{\downvdash}{arrows}{\mathrel}
1105 \fdsy@DeclareAlias{\top}{arrows}{\mathord}
1106 \fdsy@DeclareSymbol{\rightassert}{arrows}{\mathrel}
1107 \fdsy@DeclareAlias{\assert}{arrows}{\mathrel}
1108 \fdsy@DeclareAlias{\shortrighttack}{arrows}{\mathrel}
1109 \fdsy@DeclareSymbol{\upassert}{arrows}{\mathrel}
1110 \fdsy@DeclareAlias{\shortuptack}{arrows}{\mathrel}
1111 \fdsy@DeclareSymbol{\leftassert}{arrows}{\mathrel}
1112 \fdsy@DeclareAlias{\shortlefttack}{arrows}{\mathrel}
1113 \fdsy@DeclareSymbol{\downassert}{arrows}{\mathrel}
1114 \fdsy@DeclareAlias{\shortdowntack}{arrows}{\mathrel}
1115 \fdsy@DeclareSymbol{\rightvDash}{arrows}{\mathrel}
1116 \fdsy@DeclareAlias{\vDash}{arrows}{\mathrel}
1117 \fdsy@DeclareSymbol{\upvDash}{arrows}{\mathrel}
1118 \fdsy@DeclareAlias{\Vbar}{arrows}{\mathrel}
1119 \fdsy@DeclareSymbol{\leftvDash}{arrows}{\mathrel}
1120 \fdsy@DeclareAlias{\Dashv}{arrows}{\mathrel}
1121 \fdsy@DeclareSymbol{\downvDash}{arrows}{\mathrel}
1122 \fdsy@DeclareAlias{\barV}{arrows}{\mathrel}
1123 \fdsy@DeclareSymbol{\rightmodels}{arrows}{\mathrel}
1124 \fdsy@DeclareAlias{\models}{arrows}{\mathrel}
1125 \fdsy@DeclareSymbol{\upmodels}{arrows}{\mathrel}
1126 \fdsy@DeclareSymbol{\leftmodels}{arrows}{\mathrel}
1127 \fdsy@DeclareSymbol{\downmodels}{arrows}{\mathrel}
1128 \fdsy@DeclareSymbol{\rightVdash}{arrows}{\mathrel}

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1129 \fdsy@DeclareAlias{\Vdash}{arrows}{\mathrel}
1130 \fdsy@DeclareSymbol{\upVdash}{arrows}{\mathrel}
1131 \fdsy@DeclareSymbol{\leftVdash}{arrows}{\mathrel}
1132 \fdsy@DeclareAlias{\dashV}{arrows}{\mathrel}
1133 \fdsy@DeclareSymbol{\downVdash}{arrows}{\mathrel}
1134 \fdsy@DeclareSymbol{\rightAssert}{arrows}{\mathrel}
1135 \fdsy@DeclareAlias{\Assert}{arrows}{\mathrel}
1136 \fdsy@DeclareSymbol{\upAssert}{arrows}{\mathrel}
1137 \fdsy@DeclareAlias{\vBar}{arrows}{\mathrel}
1138 \fdsy@DeclareSymbol{\leftAssert}{arrows}{\mathrel}
1139 \fdsy@DeclareSymbol{\downAssert}{arrows}{\mathrel}
1140 \fdsy@DeclareAlias{\Barv}{arrows}{\mathrel}
1141 \fdsy@DeclareSymbol{\rightVDash}{arrows}{\mathrel}
1142 \fdsy@DeclareAlias{\VDash}{arrows}{\mathrel}
1143 \fdsy@DeclareSymbol{\upVDash}{arrows}{\mathrel}
1144 \fdsy@DeclareSymbol{\leftVDash}{arrows}{\mathrel}
1145 \fdsy@DeclareAlias{\DashV}{arrows}{\mathrel}
1146 \fdsy@DeclareSymbol{\downVDash}{arrows}{\mathrel}
1147 \fdsy@DeclareSymbol{\Vvdash}{arrows}{\mathrel}
1148 \fdsy@DeclareSymbol{\dashVv}{arrows}{\mathrel}
1149 \fdsy@DeclareSymbol{\vDdash}{arrows}{\mathrel}
1150 \fdsy@DeclareSymbol{\Ddashv}{arrows}{\mathrel}
1151
1152 \DeclareRobustCommand{\relbar}{\mathrel{\smash-}}
1153 \DeclareRobustCommand{\Relbar}{\mathrel=}
1154 \let\joinrel\undefined
1155 \DeclareRobustCommand\joinrel{\mathrel{\mkern-4mu}}

FdSymbolD: stroked arrows
1156 \fdsy@setslot{0}
1157 \fdsy@DeclareSymbol{\nrightarrow}{narrows}{\mathrel}
1158 \fdsy@DeclareAlias{\nto}{narrows}{\mathrel}
1159 \fdsy@DeclareSymbol{\nuparrow}{narrows}{\mathrel}
1160 \fdsy@DeclareSymbol{\nleftarrow}{narrows}{\mathrel}
1161 \fdsy@DeclareAlias{\ngets}{narrows}{\mathrel}
1162 \fdsy@DeclareSymbol{\ndownarrow}{narrows}{\mathrel}
1163 \fdsy@DeclareSymbol{\nnearrow}{narrows}{\mathrel}
1164 \fdsy@DeclareSymbol{\nnwarrow}{narrows}{\mathrel}
1165 \fdsy@DeclareSymbol{\nswarrow}{narrows}{\mathrel}
1166 \fdsy@DeclareSymbol{\nsearrow}{narrows}{\mathrel}
1167 \fdsy@DeclareSymbol{\nRightarrow}{narrows}{\mathrel}
1168 \fdsy@DeclareSymbol{\nUparrow}{narrows}{\mathrel}
1169 \fdsy@DeclareSymbol{\nLeftarrow}{narrows}{\mathrel}
1170 \fdsy@DeclareSymbol{\nDownarrow}{narrows}{\mathrel}
1171 \fdsy@DeclareSymbol{\nNearrow}{narrows}{\mathrel}
1172 \fdsy@DeclareSymbol{\nNwarrow}{narrows}{\mathrel}

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1173 \fdsy@DeclareSymbol{\nSwarrow}{narrows}{\mathrel}
1174 \fdsy@DeclareSymbol{\nSearrow}{narrows}{\mathrel}
1175 \fdsy@DeclareSymbol{\nleftrightharpoonright}{narrows}{\mathrel}
1176 \fdsy@DeclareSymbol{\nupdownarrow}{narrows}{\mathrel}
1177 \fdsy@DeclareSymbol{\nneswarrow}{narrows}{\mathrel}
1178 \fdsy@DeclareSymbol{\nnwsearrow}{narrows}{\mathrel}
1179 \fdsy@DeclareSymbol{\nLefttrightharpoonright}{narrows}{\mathrel}
1180 \fdsy@DeclareSymbol{\nUpdownarrow}{narrows}{\mathrel}
1181 \fdsy@DeclareSymbol{\nNeswarrow}{narrows}{\mathrel}
1182 \fdsy@DeclareSymbol{\nNwsearrow}{narrows}{\mathrel}
1183 \fdsy@DeclareSymbol{\ntwoheadrightarrow}{narrows}{\mathrel}
1184 \fdsy@DeclareSymbol{\ntwoheaduparrow}{narrows}{\mathrel}
1185 \fdsy@DeclareSymbol{\ntwoheadleftarrow}{narrows}{\mathrel}
1186 \fdsy@DeclareSymbol{\ntwoheaddownarrow}{narrows}{\mathrel}
1187 \fdsy@DeclareSymbol{\ntwoheadnearrow}{narrows}{\mathrel}
1188 \fdsy@DeclareSymbol{\ntwoheadnwarrow}{narrows}{\mathrel}
1189 \fdsy@DeclareSymbol{\ntwoheadswarrow}{narrows}{\mathrel}
1190 \fdsy@DeclareSymbol{\ntwoheadsearrow}{narrows}{\mathrel}
1191 \fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
1192 \fdsy@DeclareSymbol{\nuparrowtail}{narrows}{\mathrel}
1193 \fdsy@DeclareSymbol{\nleftarrowtail}{narrows}{\mathrel}
1194 \fdsy@DeclareSymbol{\ndownarrowtail}{narrows}{\mathrel}
1195 \fdsy@DeclareSymbol{\nnearrowtail}{narrows}{\mathrel}
1196 \fdsy@DeclareSymbol{\nnwarrowtail}{narrows}{\mathrel}
1197 \fdsy@DeclareSymbol{\nswarrowtail}{narrows}{\mathrel}
1198 \fdsy@DeclareSymbol{\nsearrowtail}{narrows}{\mathrel}
1199 \fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
1200 \fdsy@DeclareAlias{\nmapsto}{narrows}{\mathrel}
1201 \fdsy@DeclareSymbol{\nupmapsto}{narrows}{\mathrel}
1202 \fdsy@DeclareAlias{\nmapsup}{narrows}{\mathrel}
1203 \fdsy@DeclareSymbol{\nleftmapsto}{narrows}{\mathrel}
1204 \fdsy@DeclareAlias{\nmapsfrom}{narrows}{\mathrel}
1205 \fdsy@DeclareSymbol{\ndownmapsto}{narrows}{\mathrel}
1206 \fdsy@DeclareAlias{\nmapsdown}{narrows}{\mathrel}
1207 \fdsy@DeclareSymbol{\nRightmapsto}{narrows}{\mathrel}
1208 \fdsy@DeclareAlias{\nMapsto}{narrows}{\mathrel}
1209 \fdsy@DeclareSymbol{\nUpmapsto}{narrows}{\mathrel}
1210 \fdsy@DeclareAlias{\nMapsup}{narrows}{\mathrel}
1211 \fdsy@DeclareSymbol{\nLeftmapsto}{narrows}{\mathrel}
1212 \fdsy@DeclareAlias{\nMapsfrom}{narrows}{\mathrel}
1213 \fdsy@DeclareSymbol{\nDownmapsto}{narrows}{\mathrel}
1214 \fdsy@DeclareAlias{\nMapsdown}{narrows}{\mathrel}
1215 \fdsy@DeclareSymbol{\nhookrightarrow}{narrows}{\mathrel}
1216 \fdsy@DeclareSymbol{\nhookuparrow}{narrows}{\mathrel}
1217 \fdsy@DeclareSymbol{\nvarhookleftarrow}{narrows}{\mathrel}

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1218 \fdsy@DeclareSymbol{\nvarhookdownarrow}{narrows}{\mathrel}
1219 \fdsy@DeclareSymbol{\nvarhooknearrow}{narrows}{\mathrel}
1220 \fdsy@DeclareSymbol{\nhooknwarrow}{narrows}{\mathrel}
1221 \fdsy@DeclareAlias{\nhknwarrow}{narrows}{\mathrel}
1222 \fdsy@DeclareSymbol{\nvarhookswarrow}{narrows}{\mathrel}
1223 \fdsy@DeclareSymbol{\nhooksearrow}{narrows}{\mathrel}
1224 \fdsy@DeclareAlias{\nhksearrow}{narrows}{\mathrel}
1225 \fdsy@DeclareSymbol{\nvarhookrightarrow}{narrows}{\mathrel}
1226 \fdsy@DeclareSymbol{\nvarhookuparrow}{narrows}{\mathrel}
1227 \fdsy@DeclareSymbol{\nhookleftarrow}{narrows}{\mathrel}
1228 \fdsy@DeclareSymbol{\nhookdownarrow}{narrows}{\mathrel}
1229 \fdsy@DeclareSymbol{\nhooknearrow}{narrows}{\mathrel}
1230 \fdsy@DeclareAlias{\nhknearrow}{narrows}{\mathrel}
1231 \fdsy@DeclareSymbol{\nvarhooknwarrow}{narrows}{\mathrel}
1232 \fdsy@DeclareSymbol{\nhookswarrow}{narrows}{\mathrel}
1233 \fdsy@DeclareAlias{\nhkswarrow}{narrows}{\mathrel}
1234 \fdsy@DeclareSymbol{\nvarhooksearrow}{narrows}{\mathrel}
1235 \fdsy@DeclareSymbol{\nrightharpoonup}{narrows}{\mathrel}
1236 \fdsy@DeclareSymbol{\nupharpoonleft}{narrows}{\mathrel}
1237 \fdsy@DeclareSymbol{\nleftharpoondown}{narrows}{\mathrel}
1238 \fdsy@DeclareSymbol{\ndownharpoonright}{narrows}{\mathrel}
1239 \fdsy@DeclareSymbol{\nneharpoonnw}{narrows}{\mathrel}
1240 \fdsy@DeclareSymbol{\nnwharpoonsw}{narrows}{\mathrel}
1241 \fdsy@DeclareSymbol{\nswharpoonse}{narrows}{\mathrel}
1242 \fdsy@DeclareSymbol{\nseharpoonne}{narrows}{\mathrel}
1243 \fdsy@DeclareSymbol{\nrightharpoondown}{narrows}{\mathrel}
1244 \fdsy@DeclareSymbol{\nupharpoonright}{narrows}{\mathrel}
1245 \fdsy@DeclareAlias{\nrestriction}{narrows}{\mathrel}
1246 \fdsy@DeclareSymbol{\nleftharpoonup}{narrows}{\mathrel}
1247 \fdsy@DeclareSymbol{\ndownharpoonleft}{narrows}{\mathrel}
1248 \fdsy@DeclareSymbol{\nneharpoonse}{narrows}{\mathrel}
1249 \fdsy@DeclareSymbol{\nnwharpoonne}{narrows}{\mathrel}
1250 \fdsy@DeclareSymbol{\nswharpoonnw}{narrows}{\mathrel}
1251 \fdsy@DeclareSymbol{\nseharpoonsw}{narrows}{\mathrel}
1252 \fdsy@DeclareSymbol{\nleftrightharpoonupdown}{narrows}{\mathrel}
1253 \fdsy@DeclareSymbol{\nupdownharpoonleftright}{narrows}{\mathrel}
1254 \fdsy@DeclareSymbol{\nneswharpoonnwse}{narrows}{\mathrel}
1255 \fdsy@DeclareSymbol{\nnwseharpoonnesw}{narrows}{\mathrel}
1256 \fdsy@DeclareSymbol{\nleftrightharpoondownup}{narrows}{\mathrel}
1257 \fdsy@DeclareSymbol{\nupdownharpoonrightleft}{narrows}{\mathrel}
1258 \fdsy@DeclareSymbol{\nneswharpoonsenw}{narrows}{\mathrel}
1259 \fdsy@DeclareSymbol{\nnwseharpoonswne}{narrows}{\mathrel}
1260 \fdsy@DeclareSymbol{\nrightharpoons}{narrows}{\mathrel}
1261 \fdsy@DeclareSymbol{\nupdownharpoons}{narrows}{\mathrel}
1262 \fdsy@DeclareAlias{\nupdownharpoonsleftright}{narrows}{\mathrel}

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1263 \fdsy@DeclareSymbol{\nneswharpoons}{narrows}{\mathrel}
1264 \fdsy@DeclareSymbol{\nsenwharpoons}{narrows}{\mathrel}
1265 \fdsy@DeclareSymbol{\nleltrightharpoons}{narrows}{\mathrel}
1266 \fdsy@DeclareSymbol{\ndownupharpoons}{narrows}{\mathrel}
1267 \fdsy@DeclareAlias{\ndownupharpoonsleftright}{narrows}{\mathrel}
1268 \fdsy@DeclareSymbol{\nswneharpoons}{narrows}{\mathrel}
1269 \fdsy@DeclareSymbol{\nnwseharpoons}{narrows}{\mathrel}
1270 \fdsy@DeclareSymbol{\nrighbtkarrow}{narrows}{\mathrel}
1271 \fdsy@DeclareAlias{\ndasharrow}{narrows}{\mathrel}
1272 \fdsy@DeclareAlias{\ndashrightarrow}{narrows}{\mathrel}
1273 \fdsy@DeclareSymbol{\nupbkarrow}{narrows}{\mathrel}
1274 \fdsy@DeclareSymbol{\nleftbkarrow}{narrows}{\mathrel}
1275 \fdsy@DeclareAlias{\ndashleftarrow}{narrows}{\mathrel}
1276 \fdsy@DeclareSymbol{\ndownbkarrow}{narrows}{\mathrel}
1277 \fdsy@DeclareSymbol{\nnebkarrow}{narrows}{\mathrel}
1278 \fdsy@DeclareSymbol{\nnwbkarrow}{narrows}{\mathrel}
1279 \fdsy@DeclareSymbol{\nswbkarrow}{narrows}{\mathrel}
1280 \fdsy@DeclareSymbol{\nsebkarrow}{narrows}{\mathrel}
1281 \fdsy@DeclareSymbol{\nrighthspoon}{narrows}{\mathrel}
1282 \fdsy@DeclareAlias{\nmultimap}{narrows}{\mathrel}
1283 \fdsy@DeclareSymbol{\nupspoon}{narrows}{\mathrel}
1284 \fdsy@DeclareAlias{\ncirmid}{narrows}{\mathrel}
1285 \fdsy@DeclareSymbol{\nleftspoon}{narrows}{\mathrel}
1286 \fdsy@DeclareAlias{\nmultimapinv}{narrows}{\mathrel}
1287 \fdsy@DeclareSymbol{\ndownspoon}{narrows}{\mathrel}
1288 \fdsy@DeclareAlias{\nmidcir}{narrows}{\mathrel}
1289 \fdsy@DeclareSymbol{\nrighblackspoon}{narrows}{\mathrel}
1290 \fdsy@DeclareSymbol{\nupblackspoon}{narrows}{\mathrel}
1291 \fdsy@DeclareSymbol{\nleftblackspoon}{narrows}{\mathrel}
1292 \fdsy@DeclareSymbol{\ndownblackspoon}{narrows}{\mathrel}
1293 \fdsy@DeclareSymbol{\nleltrighthspoon}{narrows}{\mathrel}
1294 \fdsy@DeclareAlias{\ndualmap}{narrows}{\mathrel}
1295 \fdsy@DeclareSymbol{\nleltrighblackspoon}{narrows}{\mathrel}
1296 \fdsy@DeclareSymbol{\nblackwhitespoon}{narrows}{\mathrel}
1297 \fdsy@DeclareAlias{\nimageof}{narrows}{\mathrel}
1298 \fdsy@DeclareSymbol{\nwhiteblackspoon}{narrows}{\mathrel}
1299 \fdsy@DeclareAlias{\norigof}{narrows}{\mathrel}
1300 \fdsy@DeclareSymbol{\nrighpitchfork}{narrows}{\mathrel}
1301 \fdsy@DeclareSymbol{\nuppitchfork}{narrows}{\mathrel}
1302 \fdsy@DeclareAlias{\npitchfork}{narrows}{\mathrel}
1303 \fdsy@DeclareSymbol{\nleftpitchfork}{narrows}{\mathrel}
1304 \fdsy@DeclareSymbol{\ndownpitchfork}{narrows}{\mathrel}
1305 \fdsy@DeclareSymbol{\nrightrightarrows}{narrows}{\mathrel}
1306 \fdsy@DeclareSymbol{\nupuparrows}{narrows}{\mathrel}
1307 \fdsy@DeclareSymbol{\nleftleftarrows}{narrows}{\mathrel}

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1308 \fdsy@DeclareSymbol{\ndowndownarrows}{narrows}{\mathrel}
1309 \fdsy@DeclareSymbol{\nnenearrows}{narrows}{\mathrel}
1310 \fdsy@DeclareSymbol{\nnwnwarrows}{narrows}{\mathrel}
1311 \fdsy@DeclareSymbol{\nswswarrows}{narrows}{\mathrel}
1312 \fdsy@DeclareSymbol{\nsesearrows}{narrows}{\mathrel}
1313 \fdsy@DeclareSymbol{\nrightrightarrows}{narrows}{\mathrel}
1314 \fdsy@DeclareSymbol{\nupdownarrows}{narrows}{\mathrel}
1315 \fdsy@DeclareSymbol{\nneswarrows}{narrows}{\mathrel}
1316 \fdsy@DeclareSymbol{\nnwsearrows}{narrows}{\mathrel}
1317 \fdsy@DeclareSymbol{\nlefttrightrightarrows}{narrows}{\mathrel}
1318 \fdsy@DeclareSymbol{\ndownuparrows}{narrows}{\mathrel}
1319 \fdsy@DeclareSymbol{\nswnearrows}{narrows}{\mathrel}
1320 \fdsy@DeclareSymbol{\nsenwarrows}{narrows}{\mathrel}
1321 \fdsy@DeclareSymbol{\nrightharpoonup}{narrows}{\mathrel}
1322 \fdsy@DeclareAlias{\nleadsto}{narrows}{\mathrel}
1323 \fdsy@DeclareAlias{\nrightharpoonleft}{narrows}{\mathrel}
1324 \fdsy@DeclareAlias{\nrightharpoonright}{arrows}{\mathrel}
1325 \fdsy@DeclareAlias{\nrightharpoonright}{narrows}{\mathrel}
1326 \fdsy@DeclareSymbol{\nvarupwavedarrow}{narrows}{\mathrel}
1327 \fdsy@DeclareAlias{\nuplsharpoonright}{narrows}{\mathrel}
1328 \fdsy@DeclareSymbol{\nvarleftwavedarrow}{narrows}{\mathrel}
1329 \fdsy@DeclareAlias{\nleftlsharpoonright}{narrows}{\mathrel}
1330 \fdsy@DeclareSymbol{\ndownwavedarrow}{narrows}{\mathrel}
1331 \fdsy@DeclareAlias{\ndownlsharpoonright}{narrows}{\mathrel}
1332 \fdsy@DeclareSymbol{\nvarrightwavedarrow}{narrows}{\mathrel}
1333 \fdsy@DeclareAlias{\nrightrsharpoonright}{narrows}{\mathrel}
1334 \fdsy@DeclareSymbol{\nupwavedarrow}{narrows}{\mathrel}
1335 \fdsy@DeclareAlias{\nuprsharpoonright}{narrows}{\mathrel}
1336 \fdsy@DeclareSymbol{\nleftwavedarrow}{narrows}{\mathrel}
1337 \fdsy@DeclareAlias{\nleftsharpoonright}{narrows}{\mathrel}
1338 \fdsy@DeclareAlias{\nleftcurvedarrow}{arrows}{\mathrel}
1339 \fdsy@DeclareAlias{\nlefttrsharpoonright}{narrows}{\mathrel}
1340 \fdsy@DeclareSymbol{\nvardownwavedarrow}{narrows}{\mathrel}
1341 \fdsy@DeclareAlias{\ndownrsharpoonright}{narrows}{\mathrel}
1342 \fdsy@DeclareSymbol{\nlefttrightrightwavedarrow}{narrows}{\mathrel}
1343 \fdsy@DeclareAlias{\nlefttrightrsharpoonright}{narrows}{\mathrel}
1344 \fdsy@DeclareSymbol{\nupdownwavedarrow}{narrows}{\mathrel}
1345 \fdsy@DeclareAlias{\nupdownrsharpoonright}{narrows}{\mathrel}
1346 \fdsy@DeclareSymbol{\nvarlefttrightrightwavedarrow}{narrows}{\mathrel}
1347 \fdsy@DeclareAlias{\nrightrightlsharpoonright}{narrows}{\mathrel}
1348 \fdsy@DeclareSymbol{\nvarupdownwavedarrow}{narrows}{\mathrel}
1349 \fdsy@DeclareAlias{\ndownuprsharpoonright}{narrows}{\mathrel}
1350 \fdsy@DeclareSymbol{\ncwoverarcarrow}{narrows}{\mathrel}
1351 \fdsy@DeclareAlias{\ncurvearrowright}{narrows}{\mathrel}
1352 \fdsy@DeclareAlias{\nrightharpoonright}{narrows}{\mathrel}

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1353 \fdsy@DeclareSymbol{\ncwleftarcarrow}{narrows}{\mathrel}
1354 \fdsy@DeclareAlias{\nuplcurvearrow}{narrows}{\mathrel}
1355 \fdsy@DeclareSymbol{\ncwunderarcarrow}{narrows}{\mathrel}
1356 \fdsy@DeclareAlias{\nleftlcurvearrow}{narrows}{\mathrel}
1357 \fdsy@DeclareSymbol{\ncwrightarcarrow}{narrows}{\mathrel}
1358 \fdsy@DeclareAlias{\ndownlcurvearrow}{narrows}{\mathrel}
1359 \fdsy@DeclareSymbol{\ncwnwarcarrow}{narrows}{\mathrel}
1360 \fdsy@DeclareAlias{\nrighupcurvedarrow}{narrows}{\mathrel}
1361 \fdsy@DeclareAlias{\nnelcurvearrow}{narrows}{\mathrel}
1362 \fdsy@DeclareSymbol{\ncswarcarrow}{narrows}{\mathrel}
1363 \fdsy@DeclareAlias{\nupleftcurvedarrow}{narrows}{\mathrel}
1364 \fdsy@DeclareAlias{\nnwlcurvearrow}{narrows}{\mathrel}
1365 \fdsy@DeclareSymbol{\ncwsearcarrow}{narrows}{\mathrel}
1366 \fdsy@DeclareAlias{\nleftdowncurvedarrow}{narrows}{\mathrel}
1367 \fdsy@DeclareAlias{\nswlcurvearrow}{narrows}{\mathrel}
1368 \fdsy@DeclareSymbol{\ncwnearcarrow}{narrows}{\mathrel}
1369 \fdsy@DeclareAlias{\ndownrightcurvedarrow}{narrows}{\mathrel}
1370 \fdsy@DeclareAlias{\nse1curvearrow}{narrows}{\mathrel}
1371 \fdsy@DeclareSymbol{\nacwunderarcarrow}{narrows}{\mathrel}
1372 \fdsy@DeclareAlias{\nrightrcurvearrow}{narrows}{\mathrel}
1373 \fdsy@DeclareSymbol{\nacwrightarcarrow}{narrows}{\mathrel}
1374 \fdsy@DeclareAlias{\nuprcurvearrow}{narrows}{\mathrel}
1375 \fdsy@DeclareSymbol{\nacwoverarcarrow}{narrows}{\mathrel}
1376 \fdsy@DeclareAlias{\ncurvearrowleft}{narrows}{\mathrel}
1377 \fdsy@DeclareAlias{\nlefttrcurvearrow}{narrows}{\mathrel}
1378 \fdsy@DeclareSymbol{\nacwleftarcarrow}{narrows}{\mathrel}
1379 \fdsy@DeclareAlias{\ndownrcurvearrow}{narrows}{\mathrel}
1380 \fdsy@DeclareSymbol{\nacwsearcarrow}{narrows}{\mathrel}
1381 \fdsy@DeclareAlias{\nuprightcurvearrow}{narrows}{\mathrel}
1382 \fdsy@DeclareAlias{\nnercurvearrow}{narrows}{\mathrel}
1383 \fdsy@DeclareSymbol{\nacwnearcarrow}{narrows}{\mathrel}
1384 \fdsy@DeclareAlias{\nleftupcurvedarrow}{narrows}{\mathrel}
1385 \fdsy@DeclareAlias{\nnwrcurvearrow}{narrows}{\mathrel}
1386 \fdsy@DeclareSymbol{\nacwnwarcarrow}{narrows}{\mathrel}
1387 \fdsy@DeclareAlias{\ndownleftcurvedarrow}{narrows}{\mathrel}
1388 \fdsy@DeclareAlias{\nswrcurvearrow}{narrows}{\mathrel}
1389 \fdsy@DeclareSymbol{\nacswarcarrow}{narrows}{\mathrel}
1390 \fdsy@DeclareAlias{\nrighdowncurvedarrow}{narrows}{\mathrel}
1391 \fdsy@DeclareAlias{\nsercurvearrow}{narrows}{\mathrel}
1392 \fdsy@DeclareSymbol{\nbdoverarcarrow}{narrows}{\mathrel}
1393 \fdsy@DeclareAlias{\nleftrighcurvearrow}{narrows}{\mathrel}
1394 \fdsy@DeclareSymbol{\nbdleftarcarrow}{narrows}{\mathrel}
1395 \fdsy@DeclareAlias{\nupdowncurvearrow}{narrows}{\mathrel}
1396 \fdsy@DeclareSymbol{\nbdunderarcarrow}{narrows}{\mathrel}
1397 \fdsy@DeclareAlias{\nrighleftcurvearrow}{narrows}{\mathrel}

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1398 \fdsy@DeclareSymbol{\nbdrightarcarrow}{narrows}{\mathrel}
1399 \fdsy@DeclareAlias{\ndownupcurvearrow}{narrows}{\mathrel}
1400 \fdsy@DeclareSymbol{\nbdnwarcarrow}{narrows}{\mathrel}
1401 \fdsy@DeclareAlias{\nneswcurvearrow}{narrows}{\mathrel}
1402 \fdsy@DeclareSymbol{\nbdswarcarrow}{narrows}{\mathrel}
1403 \fdsy@DeclareAlias{\nnwsecurvearrow}{narrows}{\mathrel}
1404 \fdsy@DeclareSymbol{\nbdsearcarrow}{narrows}{\mathrel}
1405 \fdsy@DeclareAlias{\nswnecurvearrow}{narrows}{\mathrel}
1406 \fdsy@DeclareSymbol{\nbdnearcarrow}{narrows}{\mathrel}
1407 \fdsy@DeclareAlias{\nsenwcurvearrow}{narrows}{\mathrel}
1408 \fdsy@DeclareSymbol{\nleftfootline}{narrows}{\mathrel}
1409 \fdsy@DeclareSymbol{\nrightfootline}{narrows}{\mathrel}
1410 \fdsy@DeclareSymbol{\nacwcirculararrowup}{narrows}{\mathrel}
1411 \fdsy@DeclareSymbol{\nacwcirculararrowleft}{narrows}{\mathrel}
1412 \fdsy@DeclareAlias{\ncirculararrowleft}{narrows}{\mathrel}
1413 \fdsy@DeclareAlias{\nacwopencirculararrow}{narrows}{\mathrel}
1414 \fdsy@DeclareSymbol{\nacwcirculararrowdown}{narrows}{\mathrel}
1415 \fdsy@DeclareAlias{\nacwgapcirculararrow}{narrows}{\mathrel}
1416 \fdsy@DeclareSymbol{\nacwcirculararrowright}{narrows}{\mathrel}
1417 \fdsy@DeclareSymbol{\ncwcirculararrowdown}{narrows}{\mathrel}
1418 \fdsy@DeclareAlias{\ncwgapcirculararrow}{narrows}{\mathrel}
1419 \fdsy@DeclareSymbol{\ncwcirculararrowright}{narrows}{\mathrel}
1420 \fdsy@DeclareAlias{\ncirculararrowright}{narrows}{\mathrel}
1421 \fdsy@DeclareAlias{\ncwopencirculararrow}{narrows}{\mathrel}
1422 \fdsy@DeclareSymbol{\ncwcirculararrowup}{narrows}{\mathrel}
1423 \fdsy@DeclareSymbol{\ncwcirculararrowleft}{narrows}{\mathrel}
1424 \fdsy@DeclareSymbol{\nRrightarrow}{narrows}{\mathrel}
1425 \fdsy@DeclareSymbol{\nUparrow}{narrows}{\mathrel}
1426 \fdsy@DeclareSymbol{\nLleftarrow}{narrows}{\mathrel}
1427 \fdsy@DeclareSymbol{\nDdownarrow}{narrows}{\mathrel}
1428 \fdsy@DeclareSymbol{\nlongrightarrow}{narrows}{\mathrel}
1429 \fdsy@DeclareSymbol{\nlongleftarrow}{narrows}{\mathrel}
1430 \fdsy@DeclareSymbol{\nLongrightarrow}{narrows}{\mathrel}
1431 \fdsy@DeclareSymbol{\nLongleftarrow}{narrows}{\mathrel}
1432 \fdsy@DeclareSymbol{\nlongleftrightharpoonrightarrow}{narrows}{\mathrel}
1433 \fdsy@DeclareSymbol{\nLongleftrightharpoonrightarrow}{narrows}{\mathrel}
1434 \fdsy@DeclareSymbol{\nlongmapsto}{narrows}{\mathrel}
1435 \fdsy@DeclareSymbol{\nlongmapsfrom}{narrows}{\mathrel}
1436 \fdsy@DeclareSymbol{\nLongmapsto}{narrows}{\mathrel}
1437 \fdsy@DeclareSymbol{\nLongmapsfrom}{narrows}{\mathrel}
1438 \fdsy@DeclareSymbol{\nlongrightwavedarrow}{narrows}{\mathrel}
1439 \fdsy@DeclareAlias{\nlongleadsto}{narrows}{\mathrel}
1440 \fdsy@DeclareAlias{\nlongrightsquigarrow}{narrows}{\mathrel}
1441 \fdsy@DeclareSymbol{\nlongleftwavedarrow}{narrows}{\mathrel}
1442 \fdsy@DeclareAlias{\nlongleftsquigarrow}{narrows}{\mathrel}

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1443 \fdsy@DeclareSymbol{\nlongleftfootline}{narrows}{\mathrel}
1444 \fdsy@DeclareAlias{\nvlongdash}{narrows}{\mathrel}
1445 \fdsy@DeclareSymbol{\nlongrightfootline}{narrows}{\mathrel}
1446 \fdsy@DeclareAlias{\nlongdashv}{narrows}{\mathrel}
1447 \fdsy@setslot{224}
1448 \fdsy@DeclareSymbol{\nrightrvdash}{narrows}{\mathrel}
1449 \fdsy@DeclareAlias{\nvdash}{narrows}{\mathrel}
1450 \fdsy@DeclareSymbol{\nupvdash}{narrows}{\mathrel}
1451 \fdsy@DeclareAlias{\nperp}{narrows}{\mathrel}
1452 \fdsy@DeclareSymbol{\nleftvdash}{narrows}{\mathrel}
1453 \fdsy@DeclareAlias{\ndashv}{narrows}{\mathrel}
1454 \fdsy@DeclareSymbol{\ndownvdash}{narrows}{\mathrel}
1455 \fdsy@DeclareSymbol{\nrighthassert}{narrows}{\mathrel}
1456 \fdsy@DeclareAlias{\nassert}{narrows}{\mathrel}
1457 \fdsy@DeclareAlias{\nshortrighttack}{narrows}{\mathrel}
1458 \fdsy@DeclareSymbol{\nupassert}{narrows}{\mathrel}
1459 \fdsy@DeclareAlias{\nshortuptack}{narrows}{\mathrel}
1460 \fdsy@DeclareSymbol{\nleftassert}{narrows}{\mathrel}
1461 \fdsy@DeclareAlias{\nshortlefttack}{narrows}{\mathrel}
1462 \fdsy@DeclareSymbol{\ndownassert}{narrows}{\mathrel}
1463 \fdsy@DeclareAlias{\nshortdowntack}{narrows}{\mathrel}
1464 \fdsy@DeclareSymbol{\nrightrvDash}{narrows}{\mathrel}
1465 \fdsy@DeclareAlias{\nvDash}{narrows}{\mathrel}
1466 \fdsy@DeclareSymbol{\nupvDash}{narrows}{\mathrel}
1467 \fdsy@DeclareAlias{\nVbar}{narrows}{\mathrel}
1468 \fdsy@DeclareSymbol{\nleftvDash}{narrows}{\mathrel}
1469 \fdsy@DeclareAlias{\nDashv}{narrows}{\mathrel}
1470 \fdsy@DeclareSymbol{\ndownvDash}{narrows}{\mathrel}
1471 \fdsy@DeclareAlias{\nbarV}{narrows}{\mathrel}
1472 \fdsy@DeclareSymbol{\nrightrmodels}{narrows}{\mathrel}
1473 \fdsy@DeclareAlias{\nmodels}{narrows}{\mathrel}
1474 \fdsy@DeclareSymbol{\nupmodels}{narrows}{\mathrel}
1475 \fdsy@DeclareSymbol{\nleftmodels}{narrows}{\mathrel}
1476 \fdsy@DeclareSymbol{\ndownmodels}{narrows}{\mathrel}
1477 \fdsy@DeclareSymbol{\nrightrVdash}{narrows}{\mathrel}
1478 \fdsy@DeclareAlias{\nVdash}{narrows}{\mathrel}
1479 \fdsy@DeclareSymbol{\nupVdash}{narrows}{\mathrel}
1480 \fdsy@DeclareSymbol{\nleftVdash}{narrows}{\mathrel}
1481 \fdsy@DeclareAlias{\ndashV}{narrows}{\mathrel}
1482 \fdsy@DeclareSymbol{\ndownVdash}{narrows}{\mathrel}
1483 \fdsy@DeclareSymbol{\nrighthAssert}{narrows}{\mathrel}
1484 \fdsy@DeclareAlias{\nAssert}{narrows}{\mathrel}
1485 \fdsy@DeclareSymbol{\nupAssert}{narrows}{\mathrel}
1486 \fdsy@DeclareAlias{\nvBar}{narrows}{\mathrel}
1487 \fdsy@DeclareSymbol{\nleftAssert}{narrows}{\mathrel}

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1488 \fdsy@DeclareSymbol{\ndownAssert}{narrows}{\mathrel}
1489 \fdsy@DeclareAlias{\nBarv}{narrows}{\mathrel}
1490 \fdsy@DeclareSymbol{\nrightVDash}{narrows}{\mathrel}
1491 \fdsy@DeclareAlias{\nVDash}{narrows}{\mathrel}
1492 \fdsy@DeclareSymbol{\nupVDash}{narrows}{\mathrel}
1493 \fdsy@DeclareSymbol{\nleftVDash}{narrows}{\mathrel}
1494 \fdsy@DeclareAlias{\nDashV}{narrows}{\mathrel}
1495 \fdsy@DeclareSymbol{\ndownVDash}{narrows}{\mathrel}
1496 \fdsy@DeclareSymbol{\nVvdash}{narrows}{\mathrel}
1497 \fdsy@DeclareSymbol{\ndashVv}{narrows}{\mathrel}
1498 \fdsy@DeclareSymbol{\nvDdash}{narrows}{\mathrel}
1499 \fdsy@DeclareSymbol{\nDdashv}{narrows}{\mathrel}

```

#### FdSymbolE: large operators

```

1500 \fdsy@setslot{0}
1501 \fdsy@DeclareSymbol{\tbigplus}{largesymbols}{\mathop}
1502 \fdsy@DeclareSymbol{\dbigplus}{largesymbols}{\mathop}
1503 \fdsy@DeclareSymbol{\tbigtimes}{largesymbols}{\mathop}
1504 \fdsy@DeclareSymbol{\dbigtimes}{largesymbols}{\mathop}
1505 \fdsy@DeclareSymbol{\tbigwedge}{largesymbols}{\mathop}
1506 \fdsy@DeclareSymbol{\dbigwedge}{largesymbols}{\mathop}
1507 \fdsy@DeclareSymbol{\tbigvee}{largesymbols}{\mathop}
1508 \fdsy@DeclareSymbol{\dbigvee}{largesymbols}{\mathop}
1509 \fdsy@DeclareSymbol{\tbigwedgedot}{largesymbols}{\mathop}
1510 \fdsy@DeclareSymbol{\dbigwedgedot}{largesymbols}{\mathop}
1511 \fdsy@DeclareSymbol{\tbigveedot}{largesymbols}{\mathop}
1512 \fdsy@DeclareSymbol{\dbigveedot}{largesymbols}{\mathop}
1513 \fdsy@DeclareSymbol{\tbigdoublewedge}{largesymbols}{\mathop}
1514 \fdsy@DeclareAlias{\tconjquant}{largesymbols}{\mathop}
1515 \fdsy@DeclareSymbol{\dbigdoublewedge}{largesymbols}{\mathop}
1516 \fdsy@DeclareAlias{\dconjquant}{largesymbols}{\mathop}
1517 \fdsy@DeclareSymbol{\tbigdoublevee}{largesymbols}{\mathop}
1518 \fdsy@DeclareAlias{\tdisjquant}{largesymbols}{\mathop}
1519 \fdsy@DeclareSymbol{\dbigdoublevee}{largesymbols}{\mathop}
1520 \fdsy@DeclareAlias{\ddisjquant}{largesymbols}{\mathop}
1521 \fdsy@DeclareSymbol{\tbigcurlywedge}{largesymbols}{\mathop}
1522 \fdsy@DeclareSymbol{\dbigcurlywedge}{largesymbols}{\mathop}
1523 \fdsy@DeclareSymbol{\tbigcurlyvee}{largesymbols}{\mathop}
1524 \fdsy@DeclareSymbol{\dbigcurlyvee}{largesymbols}{\mathop}
1525 \fdsy@DeclareSymbol{\tbigcap}{largesymbols}{\mathop}
1526 \fdsy@DeclareSymbol{\dbigcap}{largesymbols}{\mathop}
1527 \fdsy@DeclareSymbol{\tbigcup}{largesymbols}{\mathop}
1528 \fdsy@DeclareSymbol{\dbigcup}{largesymbols}{\mathop}
1529 \fdsy@DeclareSymbol{\tbigcapdot}{largesymbols}{\mathop}
1530 \fdsy@DeclareSymbol{\dbigcapdot}{largesymbols}{\mathop}
1531 \fdsy@DeclareSymbol{\tbigcupdot}{largesymbols}{\mathop}

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1532 \fdsy@DeclareSymbol{\dbigcupdot}{largesymbols}{\mathop}
1533 \fdsy@DeclareSymbol{\tbigcapplus}{largesymbols}{\mathop}
1534 \fdsy@DeclareSymbol{\dbigcapplus}{largesymbols}{\mathop}
1535 \fdsy@DeclareSymbol{\tbigcupplus}{largesymbols}{\mathop}
1536 \fdsy@DeclareAlias{\tbiguplus}{largesymbols}{\mathop}
1537 \fdsy@DeclareSymbol{\dbigcupplus}{largesymbols}{\mathop}
1538 \fdsy@DeclareAlias{\dbiguplus}{largesymbols}{\mathop}
1539 \fdsy@DeclareSymbol{\tbigsqcap}{largesymbols}{\mathop}
1540 \fdsy@DeclareSymbol{\dbigsqcap}{largesymbols}{\mathop}
1541 \fdsy@DeclareSymbol{\tbigsqcup}{largesymbols}{\mathop}
1542 \fdsy@DeclareSymbol{\dbigsqcup}{largesymbols}{\mathop}
1543 \fdsy@DeclareSymbol{\tbigsqcapdot}{largesymbols}{\mathop}
1544 \fdsy@DeclareSymbol{\dbigsqcapdot}{largesymbols}{\mathop}
1545 \fdsy@DeclareSymbol{\tbigsqcupdot}{largesymbols}{\mathop}
1546 \fdsy@DeclareSymbol{\dbigsqcupdot}{largesymbols}{\mathop}
1547 \fdsy@DeclareSymbol{\tbigsqcapplus}{largesymbols}{\mathop}
1548 \fdsy@DeclareSymbol{\dbigsqcapplus}{largesymbols}{\mathop}
1549 \fdsy@DeclareSymbol{\tbigsqcupplus}{largesymbols}{\mathop}
1550 \fdsy@DeclareSymbol{\dbigsqcupplus}{largesymbols}{\mathop}
1551 \fdsy@DeclareSymbol{\tbigoplus}{largesymbols}{\mathop}
1552 \fdsy@DeclareSymbol{\dbigoplus}{largesymbols}{\mathop}
1553 \fdsy@DeclareSymbol{\tbigotimes}{largesymbols}{\mathop}
1554 \fdsy@DeclareSymbol{\dbigotimes}{largesymbols}{\mathop}
1555 \fdsy@DeclareSymbol{\tbigodot}{largesymbols}{\mathop}
1556 \fdsy@DeclareSymbol{\dbigodot}{largesymbols}{\mathop}
1557 \fdsy@DeclareSymbol{\tbigoast}{largesymbols}{\mathop}
1558 \fdsy@DeclareSymbol{\dbigoast}{largesymbols}{\mathop}
1559 \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
1560 \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
1561 \fdsy@DeclareSymbol{\tcoproduct}{largesymbols}{\mathop}
1562 \fdsy@DeclareSymbol{\dcoproduct}{largesymbols}{\mathop}
1563 \fdsy@DeclareSymbol{\tsum}{largesymbols}{\mathop}
1564 \fdsy@DeclareSymbol{\dsum}{largesymbols}{\mathop}
1565 \fdsy@DeclareSymbol{\tosum}{largesymbols}{\mathop}
1566 \fdsy@DeclareAlias{\tmodtwosum}{largesymbols}{\mathop}
1567 \fdsy@DeclareSymbol{\dosum}{largesymbols}{\mathop}
1568 \fdsy@DeclareAlias{\dmodtwosum}{largesymbols}{\mathop}
1569 \fdsy@DeclareSymbol{\tint}{largesymbols}{\mathop}
1570 \fdsy@DeclareSymbol{\dint}{largesymbols}{\mathop}
1571 \fdsy@DeclareSymbol{\ttiint}{largesymbols}{\mathop}
1572 \fdsy@DeclareSymbol{\diint}{largesymbols}{\mathop}
1573 \fdsy@DeclareSymbol{\tiiint}{largesymbols}{\mathop}
1574 \fdsy@DeclareSymbol{\diiint}{largesymbols}{\mathop}
1575 \fdsy@DeclareSymbol{\tiiiint}{largesymbols}{\mathop}
1576 \fdsy@DeclareSymbol{\diiiint}{largesymbols}{\mathop}

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```

1577 \fdsy@DeclareSymbol{\tidotsint}{largesymbols}{\mathop}
1578 \fdsy@DeclareAlias{\tdotsint}{largesymbols}{\mathop}
1579 \fdsy@DeclareSymbol{\didotsint}{largesymbols}{\mathop}
1580 \fdsy@DeclareAlias{\ddotsint}{largesymbols}{\mathop}
1581 \fdsy@DeclareSymbol{\tlandupint}{largesymbols}{\mathop}
1582 \fdsy@DeclareAlias{\tintclockwise}{largesymbols}{\mathop}
1583 \fdsy@DeclareSymbol{\dlandupint}{largesymbols}{\mathop}
1584 \fdsy@DeclareAlias{\dintclockwise}{largesymbols}{\mathop}
1585 \fdsy@DeclareSymbol{\tlanddownint}{largesymbols}{\mathop}
1586 \fdsy@DeclareAlias{\tawint}{largesymbols}{\mathop}
1587 \fdsy@DeclareAlias{\tintctrlockwise}{largesymbols}{\mathop}
1588 \fdsy@DeclareSymbol{\dlanddownint}{largesymbols}{\mathop}
1589 \fdsy@DeclareAlias{\dawint}{largesymbols}{\mathop}
1590 \fdsy@DeclareAlias{\dintctrlockwise}{largesymbols}{\mathop}
1591 \fdsy@DeclareSymbol{\tintbar}{largesymbols}{\mathop}
1592 \fdsy@DeclareSymbol{\dintbar}{largesymbols}{\mathop}
1593 \fdsy@DeclareSymbol{\tintBar}{largesymbols}{\mathop}
1594 \fdsy@DeclareSymbol{\dintBar}{largesymbols}{\mathop}
1595 \fdsy@DeclareSymbol{\tfint}{largesymbols}{\mathop}
1596 \fdsy@DeclareSymbol{\dfint}{largesymbols}{\mathop}
1597 \fdsy@DeclareSymbol{\toint}{largesymbols}{\mathop}
1598 \fdsy@DeclareSymbol{\doint}{largesymbols}{\mathop}
1599 \fdsy@DeclareSymbol{\toiint}{largesymbols}{\mathop}
1600 \fdsy@DeclareSymbol{\doiint}{largesymbols}{\mathop}
1601 \fdsy@DeclareSymbol{\toiiint}{largesymbols}{\mathop}
1602 \fdsy@DeclareSymbol{\doiiint}{largesymbols}{\mathop}
1603 \fdsy@DeclareSymbol{\trcircularrightint}{largesymbols}{\mathop}
1604 \fdsy@DeclareAlias{\tointctrlockwise}{largesymbols}{\mathop}
1605 \fdsy@DeclareSymbol{\drcircularrightint}{largesymbols}{\mathop}
1606 \fdsy@DeclareAlias{\dointctrlockwise}{largesymbols}{\mathop}
1607 \fdsy@DeclareSymbol{\tlcircularrightint}{largesymbols}{\mathop}
1608 \fdsy@DeclareAlias{\tvarointclockwise}{largesymbols}{\mathop}
1609 \fdsy@DeclareSymbol{\dlcircularrightint}{largesymbols}{\mathop}
1610 \fdsy@DeclareAlias{\dvarointclockwise}{largesymbols}{\mathop}
1611 \fdsy@DeclareSymbol{\trcircleleftint}{largesymbols}{\mathop}
1612 \fdsy@DeclareAlias{\tvarointctrlockwise}{largesymbols}{\mathop}
1613 \fdsy@DeclareSymbol{\drcircleleftint}{largesymbols}{\mathop}
1614 \fdsy@DeclareAlias{\dvarointctrlockwise}{largesymbols}{\mathop}
1615 \fdsy@DeclareSymbol{\tlcircleleftint}{largesymbols}{\mathop}
1616 \fdsy@DeclareAlias{\tointclockwise}{largesymbols}{\mathop}
1617 \fdsy@DeclareSymbol{\dlcircleleftint}{largesymbols}{\mathop}
1618 \fdsy@DeclareAlias{\dointclockwise}{largesymbols}{\mathop}
1619 \fdsy@DeclareSymbol{\tsumint}{largesymbols}{\mathop}
1620 \fdsy@DeclareSymbol{\dsumint}{largesymbols}{\mathop}
1621 \let\intop\tint

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```

1622 \let\ointop\toint
1623
1624 \fdsy@DeclareOperator{\bigplus}{\dbigplus}{\tbigplus}
1625 \fdsy@DeclareOperator{\bigtimes}{\dbigtimes}{\tbigtimes}
1626 \fdsy@DeclareOperator{\bigwedge}{\dbigwedge}{\tbigwedge}
1627 \fdsy@DeclareOperator{\bigvee}{\dbigvee}{\tbigvee}
1628 \fdsy@DeclareOperator{\bigwedgedot}{\dbigwedgedot}{\tbigwedgedot}
1629 \fdsy@DeclareOperator{\bigveedot}{\dbigveedot}{\tbigveedot}
1630 \fdsy@DeclareOperator{\bigdoublewedge}{\dbigdoublewedge}{\tbigdoublewedge}
1631 \fdsy@DeclareOperator{\conjquant}{\dconjquant}{\tconjquant}
1632 \fdsy@DeclareOperator{\bigdoublevee}{\dbigdoublevee}{\tbigdoublevee}
1633 \fdsy@DeclareOperator{\disjquant}{\ddisjquant}{\tdisjquant}
1634 \fdsy@DeclareOperator{\bigcurlywedge}{\dbigcurlywedge}{\tbigcurlywedge}
1635 \fdsy@DeclareOperator{\bigcurlyvee}{\dbigcurlyvee}{\tbigcurlyvee}
1636 \fdsy@DeclareOperator{\bigcurlywedgedot}{\dbigcurlywedgedot}{\tbigcurlywedgedot}
1637 \fdsy@DeclareOperator{\bigcurlyveedot}{\dbigcurlyveedot}{\tbigcurlyveedot}
1638 \fdsy@DeclareOperator{\bigdoublecurlywedge}{\dbigdoublecurlywedge}{\tbigdoublecurlywedge}
1639 \fdsy@DeclareOperator{\bigdoublecurlyvee}{\dbigdoublecurlyvee}{\tbigdoublecurlyvee}
1640 \fdsy@DeclareOperator{\bigcap}{\dbigcap}{\tbigcap}
1641 \fdsy@DeclareOperator{\bigcup}{\dbigcup}{\tbigcup}
1642 \fdsy@DeclareOperator{\bigcapdot}{\dbigcapdot}{\tbigcapdot}
1643 \fdsy@DeclareOperator{\bigcupdot}{\dbigcupdot}{\tbigcupdot}
1644 \fdsy@DeclareOperator{\bigcapplus}{\dbigcapplus}{\tbigcapplus}
1645 \fdsy@DeclareOperator{\bigcupplus}{\dbigcupplus}{\tbigcupplus}
1646 \fdsy@DeclareOperator{\biguplus}{\dbiguplus}{\tbiguplus}
1647 \fdsy@DeclareOperator{\bigsqcap}{\dbigsqcap}{\tbigsqcap}
1648 \fdsy@DeclareOperator{\bigsqcup}{\dbigsqcup}{\tbigsqcup}
1649 \fdsy@DeclareOperator{\bigsqcapdot}{\dbigsqcapdot}{\tbigsqcapdot}
1650 \fdsy@DeclareOperator{\bigsqcupdot}{\dbigsqcupdot}{\tbigsqcupdot}
1651 \fdsy@DeclareOperator{\bigsqcapplus}{\dbigsqcapplus}{\tbigsqcapplus}
1652 \fdsy@DeclareOperator{\bigsqcupplus}{\dbigsqcupplus}{\tbigsqcupplus}
1653 \fdsy@DeclareOperator{\bigoplus}{\dbigoplus}{\tbigoplus}
1654 \fdsy@DeclareOperator{\bigotimes}{\dbigotimes}{\tbigotimes}
1655 \fdsy@DeclareOperator{\bigodot}{\dbigodot}{\tbigodot}
1656 \fdsy@DeclareOperator{\bigooast}{\dbigoast}{\tbigooast}
1657 \fdsy@DeclareOperator{\sum}{\dsum}{\tsum}
1658 \fdsy@DeclareOperator{\osum}{\dosum}{\tosum}
1659 \fdsy@DeclareOperator{\modtwosum}{\dmodtwosum}{\tmodtwosum}
1660 \fdsy@DeclareOperator{\prod}{\dprod}{\tprod}
1661 \fdsy@DeclareOperator{\coprod}{\dcoprod}{\tcoprod}
1662 \fdsy@DeclareIntegral{\iint}{\diint}{\tiint}
1663 \fdsy@DeclareIntegral{\iiint}{\diiint}{\tiiint}
1664 \fdsy@DeclareIntegral{\iiiiint}{\diiiiint}{\tiiiint}
1665 \fdsy@DeclareIntegral{\idotsint}{\didotsint}{\tidotsint}
1666 \fdsy@DeclareIntegral{\dotsint}{\ddotsint}{\tdotsint}

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1667 \fdsy@DeclareIntegral{\landupint}{\dlandupint}{\tlandupint}
1668 \fdsy@DeclareIntegral{\intclockwise}{\dintclockwise}{\tintclockwise}
1669 \fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
1670 \fdsy@DeclareIntegral{\awint}{\dawint}{\tawint}
1671 \fdsy@DeclareIntegral{\intctrclockwise}{\dintctrclockwise}{\tintctrclockwise}
1672 \fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
1673 \fdsy@DeclareIntegral{\intbar}{\dintbar}{\tintbar}
1674 \fdsy@DeclareIntegral{\intBar}{\dintBar}{\tintBar}
1675 \fdsy@DeclareIntegral{\fint}{\dfint}{\tfint}
1676 \fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
1677 \fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
1678 \fdsy@DeclareIntegral{\rcircclerightint}{\drcircclerightint}{\trcircclerightint}
1679 \fdsy@DeclareIntegral{\ointctrclockwise}{\dointctrclockwise}{\tointctrclockwise}
1680 \fdsy@DeclareIntegral{\lcircclerightint}{\dlcircclerightint}{\tlcircclerightint}
1681 \fdsy@DeclareIntegral{\varointclockwise}{\dvarointclockwise}{\tvarointclockwise}
1682 \fdsy@DeclareIntegral{\rcircleleftint}{\drcircleleftint}{\trcircleleftint}
1683 \fdsy@DeclareIntegral{\varointctrclockwise}{\dvarointctrclockwise}{\tvarointctrclockwise}
1684 \fdsy@DeclareIntegral{\lcircleleftint}{\dlcircleleftint}{\tlcircleleftint}
1685 \fdsy@DeclareIntegral{\ointclockwise}{\dointclockwise}{\tointclockwise}
1686 \fdsy@DeclareIntegral{\sumint}{\dsumint}{\tsumint}
1687
1688 \def\intkern@{\mkern-8.5mu\mathchoice{\mkern-1mu}{}}{}{}{}
1689 \def\intdots@{\mkern-6mu%
1690   \mathchoice{\@cdots}%
1691   {{\cdotp}\mkern0.5mu{\cdotp}\mkern0.5mu{\cdotp}}%
1692   {{\cdotp}{\cdotp}{\cdotp}}%
1693   {{\cdotp}{\cdotp}{\cdotp}}%
1694   \mkern-6mu}

Math accents.
1695 \DeclareMathAccent{\widehat}{\mathord}{largesymbols}{72}
1696 \DeclareMathAccent{\widetilde}{\mathord}{largesymbols}{78}
1697 \DeclareMathAccent{\wideparen}{\mathord}{largesymbols}{7E}
1698 \DeclareMathAccent{\vec}{\mathord}{largesymbols}{84}
1699 \DeclareMathAccent{\middlebar}{\mathord}{largesymbols}{85}
1700 \DeclareMathAccent{\middleslash}{\mathord}{largesymbols}{86}
1701 \DeclareMathAccent{\strokethrough}{\mathord}{largesymbols}{87}

FdSymbolF: delimiters
1702 \let\lfloor\undefined
1703 \let\rfloor\undefined
1704 \let\lceil\undefined
1705 \let\rceil\undefined
1706 \let\langle\undefined
1707 \let\rangle\undefined
1708 \iffdsy@largedelims
1709 \fdsy@DeclareOpen{({}{delimiters}{01}

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1710 \fdsy@DeclareClose{}{delimiters}"07}
1711 \fdsy@DeclareOpen{\lparen}{delimiters}"01}
1712 \fdsy@DeclareClose{\rparen}{delimiters}"07}
1713 \fdsy@DeclareOpen{[]}{delimiters}"13}
1714 \fdsy@DeclareClose{[]}{delimiters}"19}
1715 \fdsy@DeclareOpen{\lbrack}{delimiters}"13}
1716 \fdsy@DeclareClose{\rbrack}{delimiters}"19}
1717 \fdsy@DeclareOpen{\lfloor}{delimiters}"1F}
1718 \fdsy@DeclareClose{\rfloor}{delimiters}"25}
1719 \fdsy@DeclareOpen{\lceil}{delimiters}"2B}
1720 \fdsy@DeclareClose{\rceil}{delimiters}"31}
1721 \fdsy@DeclareOpen{\ulcorner}{delimiters}"37}
1722 \fdsy@DeclareClose{\urcorner}{delimiters}"3D}
1723 \fdsy@DeclareOpen{\llcorner}{delimiters}"43}
1724 \fdsy@DeclareClose{\lrcorner}{delimiters}"49}
1725 \fdsy@DeclareOpen{\ullcorner}{delimiters}"4F}
1726 \fdsy@DeclareClose{\ulrcorner}{delimiters}"55}
1727 \fdsy@DeclareOpen{\lsem}{delimiters}"61}
1728 \fdsy@DeclareClose{\rsem}{delimiters}"67}
1729 \fdsy@DeclareOpen{\lBrack}{delimiters}"61}
1730 \fdsy@DeclareClose{\rBrack}{delimiters}"67}
1731 \fdsy@DeclareOpen{\lbrace}{delimiters}"73}
1732 \fdsy@DeclareClose{\rbrace}{delimiters}"79}
1733 \fdsy@DeclareOpen{<}{delimiters}"86}
1734 \fdsy@DeclareClose{>}{delimiters}"8C}
1735 \fdsy@DeclareOpen{\langle}{delimiters}"86}
1736 \fdsy@DeclareClose{\rangle}{delimiters}"8C}
1737 \fdsy@DeclareOpen{\lAngle}{delimiters}"92}
1738 \fdsy@DeclareClose{\rAngle}{delimiters}"98}
1739 \fdsy@DeclareOpen{\langedot}{delimiters}"9E}
1740 \fdsy@DeclareClose{\rangedot}{delimiters}"A4}
1741 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}"AA}
1742 \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}"AA}
1743 \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}"AA}
1744 \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}"B0}
1745 \expandafter\DeclareMathDelimiter\@backslashchar%
1746 {\mathord}{delimiters}"B0}{delimiters}"B0}
1747 \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}"B0}
1748 \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}"B7}
1749 \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}"B7}
1750 \fdsy@DeclareOpen{\lvert}{delimiters}"B7}
1751 \fdsy@DeclareClose{\rvert}{delimiters}"B7}
1752 \DeclareMathSymbol{\mid}{\mathrel}{delimiters}"B7}
1753 \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}"BA}
1754 \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}"BE}

```

```

1755 \fdsy@DeclareOpen{\lVert}{delimiters}{ "BE}
1756 \fdsy@DeclareClose{\rVert}{delimiters}{ "BE}
1757 \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}{ "BE}
1758 \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}{ "C1}
1759 \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}{ "C4}
1760 \fdsy@DeclareOpen{\lVvert}{delimiters}{ "C4}
1761 \fdsy@DeclareClose{\rVvert}{delimiters}{ "C4}
1762 \else
1763 \fdsy@DeclareOpen{(){delimiters}{ "00}
1764 \fdsy@DeclareClose{)}{delimiters}{ "06}
1765 \fdsy@DeclareOpen{\lparen}{delimiters}{ "00}
1766 \fdsy@DeclareClose{\rparen}{delimiters}{ "06}
1767 \fdsy@DeclareOpen{[]}{delimiters}{ "12}
1768 \fdsy@DeclareClose{[]}{delimiters}{ "18}
1769 \fdsy@DeclareOpen{\lbrack}{delimiters}{ "12}
1770 \fdsy@DeclareClose{\rbrack}{delimiters}{ "18}
1771 \fdsy@DeclareOpen{\lfloor}{delimiters}{ "1E}
1772 \fdsy@DeclareClose{\rfloor}{delimiters}{ "24}
1773 \fdsy@DeclareOpen{\lceil}{delimiters}{ "2A}
1774 \fdsy@DeclareClose{\rceil}{delimiters}{ "30}
1775 \fdsy@DeclareOpen{\ulcorner}{delimiters}{ "36}
1776 \fdsy@DeclareClose{\urcorner}{delimiters}{ "3C}
1777 \fdsy@DeclareOpen{\llcorner}{delimiters}{ "42}
1778 \fdsy@DeclareClose{\lrcorner}{delimiters}{ "48}
1779 \fdsy@DeclareOpen{\ulcorner}{delimiters}{ "4E}
1780 \fdsy@DeclareClose{\ulcorner}{delimiters}{ "54}
1781 \fdsy@DeclareOpen{\lsem}{delimiters}{ "60}
1782 \fdsy@DeclareClose{\rsem}{delimiters}{ "66}
1783 \fdsy@DeclareOpen{\lBrack}{delimiters}{ "60}
1784 \fdsy@DeclareClose{\rBrack}{delimiters}{ "66}
1785 \fdsy@DeclareOpen{\lbrace}{delimiters}{ "72}
1786 \fdsy@DeclareClose{\rbrace}{delimiters}{ "78}
1787 \fdsy@DeclareOpen{<}{delimiters}{ "85}
1788 \fdsy@DeclareClose{>}{delimiters}{ "8B}
1789 \fdsy@DeclareOpen{\langle}{delimiters}{ "85}
1790 \fdsy@DeclareClose{\rangle}{delimiters}{ "8B}
1791 \fdsy@DeclareOpen{\lAngle}{delimiters}{ "91}
1792 \fdsy@DeclareClose{\rAngle}{delimiters}{ "97}
1793 \fdsy@DeclareOpen{\langledot}{delimiters}{ "9D}
1794 \fdsy@DeclareClose{\rangledot}{delimiters}{ "A3}
1795 \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}{ "A9}
1796 \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}{ "A9}
1797 \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}{ "A9}
1798 \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}{ "AF}
1799 \expandafter\DeclareMathDelimiter\@backslashchar%

```

```

1800   {\mathord}{delimiters}"AF}{delimiters}"AF}
1801   \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}"AF}
1802   \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}"B6}
1803   \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}"B6}
1804   \fdsy@DeclareOpen{\lvert}{delimiters}"B6}
1805   \fdsy@DeclareClose{\rvert}{delimiters}"B6}
1806   \DeclareMathSymbol{\mid}{\mathrel}{delimiters}"B6}
1807   \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}"B9}
1808   \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}"BD}
1809   \fdsy@DeclareOpen{\lVert}{delimiters}"BD}
1810   \fdsy@DeclareClose{\rVert}{delimiters}"BD}
1811   \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}"BD}
1812   \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}"C0}
1813   \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}"C3}
1814   \fdsy@DeclareOpen{\lVvert}{delimiters}"C3}
1815   \fdsy@DeclareClose{\rVvert}{delimiters}"C3}
1816 \fi
1817 \let\lVert\Vert
1818 \let\divides\mid
1819 \let\ndivides\nmid
1820 \DeclareMathSymbol{\shortmid}{\mathrel}{delimiters}"B5}
1821 \DeclareMathSymbol{\nshortmid}{\mathrel}{delimiters}"B8}
1822 \DeclareMathSymbol{\shortparallel}{\mathrel}{delimiters}"BC}
1823 \DeclareMathSymbol{\nshortparallel}{\mathrel}{delimiters}"BF}
1824 \fdsy@DeclareDelimiter{\arrowvert}{\mathord}{delimiters}"BB}
1825 \fdsy@DeclareDelimiter{\Arrowvert}{\mathord}{delimiters}"C2}
1826 \fdsy@DeclareClose{\lgroup}{delimiters}"7E}
1827 \fdsy@DeclareOpen{\rgroup}{delimiters}"7F}
1828 \fdsy@DeclareClose{\rmoustache}{delimiters}"80}
1829 \fdsy@DeclareOpen{\lmoustache}{delimiters}"81}
1830 \fdsy@DeclareDelimiter{\bracevert}{\mathord}{delimiters}"84}
1831 \let\uparrow\undefined
1832 \let\downarrow\undefined
1833 \let\updownarrow\undefined
1834 \let\Uparrow\undefined
1835 \let\Downarrow\undefined
1836 \let\Updownarrow\undefined
1837 \DeclareMathDelimiter{\uparrow}{\mathrel}{arrows}"01}{delimiters}"C6}
1838 \DeclareMathDelimiter{\downarrow}{\mathrel}{arrows}"03}{delimiters}"C7}
1839 \DeclareMathDelimiter{\updownarrow}{\mathrel}{arrows}"11}{delimiters}"C8}
1840 \DeclareMathDelimiter{\Uparrow}{\mathrel}{arrows}"09}{delimiters}"C9}
1841 \DeclareMathDelimiter{\Downarrow}{\mathrel}{arrows}"0B}{delimiters}"CA}
1842 \DeclareMathDelimiter{\Updownarrow}{\mathrel}{arrows}"15}{delimiters}"CB}

Horizontal braces.
1843 \DeclareMathSymbol{\braced}{\mathord}{delimiters}"CC}

```

```

1844 \DeclareMathSymbol{\bracelu}{\mathord}{delimiters}{CD}
1845 \DeclareMathSymbol{\bracerd}{\mathord}{delimiters}{CE}
1846 \DeclareMathSymbol{\braceru}{\mathord}{delimiters}{CF}
1847 \DeclareMathSymbol{\bracemd}{\mathord}{delimiters}{D0}
1848 \DeclareMathSymbol{\bracemu}{\mathord}{delimiters}{D1}
1849 \DeclareMathSymbol{\bracemid}{\mathord}{delimiters}{D2}
1850
1851 \def\bracefill@#1#2#3#4#5{$\m@th#5#1\leaders\hbox{ $#4$}\hfill#2\leaders\hbox{ $#4$}\hfill#3$}
1852 \def\downbracefill@{\bracefill@\braced\bracemd\bracerd\bracemid}
1853 \def\upbracefill@{\bracefill@\bracelu\bracemu\braceru\bracemid}
1854 \def\downgroupfill@{\bracefill@\braced{} \bracerd\bracemid}
1855 \def\upgroupfill@{\bracefill@\bracelu{} \braceru\bracemid}
1856 \def\linesegmentfill@{\arrowfill@\leftfootline\relbar\rightfootline}
1857 \def\leftharpoonfill@{\arrowfill@\leftharpoondown\relbar\relbar}
1858 \def\rightharpoonfill@{\arrowfill@\relbar\relbar\rightharpoonup}
1859
1860 \DeclareRobustCommand{\overbrace}[1]{\mathop{\mathpalette{\overarrow@downbracefill@}{#1}}\limits}
1861 \DeclareRobustCommand{\underbrace}[1]{\mathop{\mathpalette{\underarrow@upbracefill@}{#1}}\limits}
1862 \DeclareRobustCommand{\overgroup}{\mathpalette{\overarrow@downgroupfill@}}
1863 \DeclareRobustCommand{\undergroup}{\mathpalette{\underarrow@upgroupfill@}}
1864 \DeclareRobustCommand{\overlinesegment}{\mathpalette{\overarrow@linesegmentfill@}}
1865 \DeclareRobustCommand{\overleftharpoon}{\mathpalette{\overarrow@leftharpoonfill@}}
1866 \DeclareRobustCommand{\overrightharpoon}{\mathpalette{\overarrow@rightharpoonfill@}}
1867 \DeclareRobustCommand{\underlinesegment}{\mathpalette{\underarrow@linesegmentfill@}}

```

Radical symbols.

```

1868 \iffdsy@largedelims
1869 \DeclareMathRadical{\sqrtsign}{delimiters}{D4}{delimiters}{D4}
1870 \DeclareMathSymbol{\surd}{\mathop}{delimiters}{D4}
1871 \else
1872 \DeclareMathRadical{\sqrtsign}{delimiters}{D3}{delimiters}{D3}
1873 \DeclareMathSymbol{\surd}{\mathop}{delimiters}{D3}
1874 \fi

```

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

```

1875 \def\r@t#1#2{\setbox\z@\hbox{$\m@th#1\sqrt{#2}$}%
1876 \dimen@ \ht\z@ \advance\dimen@-\dp\z@
1877 \mkern5mu\raise.6\dimen@copy\rootbox \mkern-8mu\box\z@}

```

Mathchars.

```

1878 \DeclareMathSymbol{+}{\mathbin}{symbols}{11}
1879 \DeclareMathSymbol{-}{\mathbin}{symbols}{0E}
1880 \DeclareMathSymbol{*}{\mathbin}{symbols}{98}
1881 \DeclareMathSymbol{:}{\mathrel}{symbols}{02}
1882 \DeclareMathSymbol{=}{\mathrel}{relations}{00}
1883 \DeclareMathSymbol{<}{\mathrel}{relations}{24}

```

```

1884 \DeclareMathSymbol{>}{\mathrel}{relations}{"25}
1885 \iffdsy@largedelims
1886 \DeclareMathSymbol{|}{\mathord}{delimiters}{"B6}
1887 \DeclareMathSymbol{({}{\mathopen}{delimiters}{"01}
1888 \DeclareMathSymbol{)}{\mathclose}{delimiters}{"07}
1889 \DeclareMathSymbol{[}{\mathopen}{delimiters}{"13}
1890 \DeclareMathSymbol{]}\mathclose}{delimiters}{"19}
1891 \DeclareMathSymbol{/}{\mathord}{delimiters}{"AA}
1892 \else
1893 \DeclareMathSymbol{|}{\mathord}{delimiters}{"B5}
1894 \DeclareMathSymbol{({}{\mathopen}{delimiters}{"00}
1895 \DeclareMathSymbol{)}{\mathclose}{delimiters}{"06}
1896 \DeclareMathSymbol{[}{\mathopen}{delimiters}{"12}
1897 \DeclareMathSymbol{]}\mathclose}{delimiters}{"18}
1898 \DeclareMathSymbol{/}{\mathord}{delimiters}{"A9}
1899 \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.

```

1900 \def\c@ncel#1#2{\m@th\oalign{$\hfil#1/\hfil$\cr cr$#1#2$}}
1901 \def\not#1{\mathrel{\m@th\mathpalette\c@ncel{#1}}}
1902 \
```