Unicode declarations for \LaTeX documents.

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April 3, 2020

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1 About this file

In order to write LATEX documents using unicode in the source code, we must often tell LATEX what we want the unicode characters to be rendered as.

There are at least two ways to inform \LaTeX of unicode character translations;

• \DeclareUnicodeCharacter; this command does not work with Xe-LaTeX or LuaLaTeX, which I use.

• \newunicodechar; this command is provided by the newunicodechar package, which may not be pre-installed for all LATEX users.

This collection uses the second.

1.1 Usage

This file generates (via Org Babel tangling) the file unicode.sty.

To use it, either place it in the same directory as your .tex file, and require it via \usepackage{unicode}.

Alternatively, place it in your texmf directory to allow global usage on your system. That directory is commonly located at the following locations on various OS's.

- Linux
 - ~/texmf/tex/latex/local/
- Mac OS X
 - /Users/<user name>/Library/texmf/tex/latex/local/
- Windows 10 (and miktex)
 - C:\Users\<user name>\Appdata\Local\MikTex\<number>\tex\latex\local\
- Windows Vista/7
 - C:\Users\<user name>\texmf\tex\latex\local\
- Windows XP
 - C:\Documents and Settings\<user name>\texmf\tex\latex\local\

By default, we assume the standard pdflatex typesetting engine is used, if you are using XeLaTeX or LuaLaTeX, then simply declare:

\pdflatexfalse

1.2 Required LaTeX packages

Of course we require the newunicodechar package to use that command.

```
\usepackage{newunicodechar}
```

```
\usepackage{ifxetex, ifluatex} % Also used in agda.sty:
\hookrightarrow xifthen
% https://tex.stackexchange.com/questions/47576/combining-
\rightarrow if xetex-and-ifluatex-with-the-logical-or-operation
\newif\ifpdflatex
\ifxetex
  \pdflatexfalse
\else
  \ifluatex
    \pdflatexfalse
  \else
    \pdflatextrue
  \fi
\fi
%\newif \in f
%\pdflatextrue
%% To use other typesetting engines, declare the following:
%% \pdflatexfalse
```

The unicode-math package "provides a complete implementation of unicode maths for XeLaTeX and LuaLaTeX".

1.3 Contributing to this document

This document is written in Emacs using Org mode. While the exported PDF version, etc., show a collection of LaTeX source blocks, these are in fact generated by an Emacs Lisp script below.

That means that contributions to this document should modify the Emacs Lisp script, not unicode.sty or the LaTeX source blocks themselves.

1.4 The Emacs Lisp script

In this document, several lists of unicode character, LATEX translation pairs are declared, and then "wrapped" into latex source blocks, using this function to map the pairs into newunicodechar declarations.

generate-newunicodechars

2 Blackboard, calligraphic, etc.

```
%-----
% Blackboard, calligraphic, etc.
%------
```

These lists are most likely complete, unless I have missed some characters aside from Latin letters, Greek letters and Arabic numerals which should be included.

2.1 Blackboard

```
%-----%
Blackboard
%------
```

2.1.1 Lowercase latin

```
%------
% Lowercase latin
%-----
\usepackage{bbm} % for double stroke lower case letters
\ifpdflatex
  \newunicodechar{0}{\ensuremath{\mathbbm{a}}}
\else
  \newunicodechar{0}{\ensuremath{\mathbb{a}}}
\fi
\ifpdflatex
```

```
\newunicodechar{b}{\ensuremath{\mathbbm{b}}}
       \newunicodechar{b}{\ensuremath{\mathbb{b}}}}
\fi
\ifpdflatex
       \newunicodechar{c}{\ensuremath{\mathbbm{c}}}
\else
       \mbox{\colored} \colored \co
\fi
\ifpdflatex
       \newunicodechar{d}{\ensuremath{\mathbbm{d}}}}
       \newunicodechar{d}{\ensuremath{\mathbb{d}}}}
\fi
\ifpdflatex
       \newunicodechar{@}{\ensuremath{\mathbbm{e}}}}
       \newunicodechar{e}{\ensuremath{\mathbb{e}}}}
\fi
\ifpdflatex
      \new unicode char { { } {\new unicode char { } { } {\new unicode char { } { } { } } } }
\fi
\ifpdflatex
       \newunicodechar{g}{\ensuremath{\mathbbm{g}}}}
\else
       \newunicodechar{g}{\ensuremath{\mathbb{g}}}}
\fi
\ifpdflatex
       \new unicode char {$h$} {\new unicode char {$h$}} {\new unicode char {$h$}} 
\fi
\ifpdflatex
       \newunicodechar{i}{\ensuremath{\mathbbm{i}}}
       \newunicodechar{i}{\ensuremath{\mathbb{i}}}
\fi
\ifpdflatex
```

```
\newunicodechar{j}{\ensuremath{\mathbb{j}}}}
\fi
\ifpdflatex
       \mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodechar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox{\newunicodehar}_{\mbox
\else
       \mbox{\newunicodechar}_{\k}^{\cmath{\mathbb}_{\k}}
\fi
\ifpdflatex
       \new unicode char { | } {\new unicode char { | } {\new unicode char { | } } }
       \new unicode char { | } {\new unicode char { | } {\new unicode char { | } } }
\fi
\ifpdflatex
       \newunicodechar{m}{\ensuremath{\mathbbm{m}}}
       \newunicodechar{m}{\ensuremath{\mathbb{m}}}
\fi
\ifpdflatex
      \newunicodechar{m}{\ensuremath{\mathbbm{n}}}
      \fi
\ifpdflatex
       \label{lem:codechar} $$\operatorname{o}{\operatorname{mathbbm}\{o\}}$$
\else
      \new unicode char {\tt 0}{\new unicode char {\tt 0}{\new unicode char {\tt 0}}} \\
\fi
\ifpdflatex
       \newunicodechar{p}{\ensuremath{\mathbbm{p}}}}
       \mbox{\ensuremath{\mathbb{p}}}
\fi
\ifpdflatex
       \newunicodechar{q}{\ensuremath{\mathbbm{q}}}}
       \newunicodechar{q}{\ensuremath{\mathbb{q}}}}
\fi
\ifpdflatex
```

```
\else
 \fi
\ifpdflatex
 \newunicodechar{s}{\ensuremath{\mathbbm{s}}}
\else
 \newunicodechar{s}{\ensuremath{\mathbb{s}}}}
\fi
\ifpdflatex
 \newunicodechar{\text{\text{\mathbbm{t}}}}
 \new unicode char \{l\} {\new unit} \{t\} \}
\fi
\ifpdflatex
 \newunicodechar{u}{\ensuremath{\mathbb{u}}}}
\fi
\ifpdflatex
 \newunicodechar{v}{\ensuremath{\mathbbm{v}}}
 \newunicodechar{v}{\ensuremath{\mathbb{v}}}}
\fi
\ifpdflatex
 \verb|\newunicodechar{w}{\color=math{\mathbb{w}}}|
\else
 \fi
\ifpdflatex
 \newunicodechar{x}{\ensuremath{\mathbbm{x}}}
 \newunicodechar{x}{\ensuremath{\mathbb{x}}}}
\fi
\ifpdflatex
 \newunicodechar{y}{\ensuremath{\mathbbm{y}}}
 \newunicodechar{y}{\ensuremath{\mathbb{y}}}}
\fi
\ifpdflatex
```

```
\label{eq:codechar} $$ \operatorname{\mathbb{Z}}{\operatorname{\mathbb{Z}}} \ensuremath{\mathbb{Z}}} $$ \ensuremath{\operatorname{\mathbb{Z}}} \ensuremath{\mathbb{Z}}} $$ \fi
```

2.1.2 Uppercase latin

```
% Uppercase latin
\new unicode char {A}{\new unicode char {A}}{\new unicode char {A}
\mbox{\newunicodechar}{\B}{\consumerath}{\mbox{\mbox{\mbox{mathbb}}}}
\mbox{\codechar}{\mathbb{C}}{\codechar}{\codechar}{\codechar}{\codechar}
\mbox{\newunicodechar}{\mathbb{D}}{\newunicodechar}{\mathbb{D}}}
\mbox{\newunicodechar}{\mathbb{E}}{\newunicodechar}{\mathbb{E}}}
\mbox{\newunicodechar}{\mathbb{F}}{\newunicodechar}{\mathbb{F}}}
\mbox{\newunicodechar}{\mathbb{G}}{\newunicodechar}{\mbox{\newunicodechar}}
\mbox{\newunicodechar}{\hbwighter}{\color=0.5cm} \
\newunicodechar{||}{\ensuremath{\mathbb{I}}}}
\mbox{\newunicodechar}{\mathbb{K}}{\newunicodechar}{\mathbb{K}}}
\new unicode char \{L\} \{\new unit holds \{L\}\} \}
\newunicodechar{M}{\ensuremath{\mathbb{M}}}
\mbox{\newunicodechar}{\N}{\consumerath}{\mbox{\mathbb}{N}}
\mbox{\newunicodechar}{\ensuremath}{\mbox{\mathbb}}
\mbox{\newunicodechar}{\mathbb{R}}{\newunicodechar}{\mathbb{R}}}
\new unicode char {\$}{\new unicode char {\$}}{\new unicode char {\$}}
\new unicode char {T}{\left(ensuremath{\mathbb{T}}\right)}
\mbox{\newunicodechar}{\wbsty}{\newunicodechar}{\wbsty}
\mbox{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}
\mbox{\newunicodechar}{\w}_{\newunicodechar}{\w}_{\newunicodechar}
\mbox{\newunicodechar}{X}{\newunicodechar}{X}}
\new unicode char \{Y\} \{\new unit holds \{Y\}\} \}
\mbox{\newunicodechar}{\mathbb{Z}}{\newunicodechar}{\mbox{\newunicodechar}}
```

2.1.3 Greek complete % Greek <u>%-----</u> There are unfortunately not many included in Unicode. \ifpdflatex $\verb|\newunicodechar{[]}{\newunicodechar{[]}}|$ \else \fi \ifpdflatex \newunicodechar{\(\) \\ \(\) \\ \ensuremath{TODO}\\ \) \\ \newunicodechar{\(\) \newunicodechar\(\) \left\ \) \newunicodechar\(\ \fi \ifpdflatex $\mbox{\newunicodechar}{\Pi}{\colored{1000}}$ \fi \ifpdflatex \newunicodechar{\pi}{\ensuremath{TODO}}} \newunicodechar{\pi}{\ensuremath{\mathbb{\pi}}} \fi \ifpdflatex $\mbox{\newunicodechar}{\mathbb{Z}}{\newunicodechar}$ \else \fi 2.2Math calligraphic %-----% Math calligraphic

2.2.1 Lowercase latin

```
%-----
% Uppercase latin
\ifpdflatex
  \verb|\newunicodechar{|a|}{\newunicodechar{a}}|
  \new unicode char \{a\} \{\new unit ode char \{a\}\} \}
\fi
\ifpdflatex
  \new unicode char \{b\} \{\new unicode char \{b\}\} \}
\else
  \new unicode char \{b\} \{\new unit ode char \{b\}\} \}
\fi
\ifpdflatex
  \new unicode char \{c\} \{\new unicode char \{c\}\} \}
  \verb|\newunicodechar|{c}{\newunicodechar}{c}| \\
\fi
\ifpdflatex
  \new unicode char{d}{\new unicode char{d}}
  \new unicode char \{d\} \{\new unit ode char \{d\} \} \}
\fi
\ifpdflatex
  \verb|\newunicodechar| \{e\} \{ \newunicodechar \{e\} \} \}
  \verb|\newunicodechar|{e}{\newunicodechar}{e}| \\
\fi
\ifpdflatex
  \mbox{\ \ } \{\mbox{\ \ \ \ \ } \{\mbox{\ \ \ \ \ } \}
  \newunicodechar{f}{\ensuremath{\mathcal{f}}}}
\fi
\ifpdflatex
  \new unicode char \{g\} \{\new unicode char \{g\}\} \}
  \new unicode char \{g\} \{\new unit code char \{g\} \} \}
\fi
```

```
\ifpdflatex
       \verb|\newunicodechar|{h}{\newunicodechar}{h}| \\
       \verb|\newunicodechar|{h}{\newunicodechar}{h}| \\
\fi
\ifpdflatex
       \mbox{\ensuremath{i}}{\ensuremath{i}}
       \new unicode char \{i\} \{\new unit code char \{i\}\} \}
\fi
\ifpdflatex
       \newunicodechar{j}{\ensuremath{j}}
\else
       \new unicode char \{j\} \{\new unit code char \{j\}\} \}
\fi
\ifpdflatex
       \new unicode char \{k\} \{\new unimpose k\} \}
\else
       \verb|\newunicodechar|{k}{\newunicodechar}{k}| \\
\fi
\ifpdflatex
       \new unicode char \{l\} \{\new unimpose the last of the
       \new unicode char \{l\} \{\new unit ode char \{l\} \} \}
\fi
\ifpdflatex
       \verb|\newunicodechar|{m}{\newunicodechar}| \\
       \verb|\newunicodechar|{m}{\colored{m}}| \\
\fi
\ifpdflatex
       \verb|\newunicodechar{n}{\newunicodechar{n}}|
       \verb|\newunicodechar{|n|}{\newunicodechar{n}}|
\fi
\ifpdflatex
       \newunicodechar{o}{\ensuremath{o}}}
\else
       \newunicodechar{o}{\ensuremath{\mathcal{o}}}}
\fi
```

```
\ifpdflatex
       \verb|\newunicodechar{|p|}{\newunicodechar{|p|}}|
       \verb|\newunicodechar|{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\newunicodechar}{p}{\n
\fi
\ifpdflatex
       \new unicode char \{q\} \{\new unicode char \{q\}\} \}
       \new unicode char \{q\} \{\new unit ode char \{q\}\} \}
\fi
\ifpdflatex
       \verb|\newunicodechar|{r}{\langle newunicodechar{r}}|
\else
       \fi
\ifpdflatex
       \new unicode char \{s\} \{\new unicode char \{s\}\} \}
\else
       \verb|\newunicodechar| \{s\} {\newunicodechar} \{s\} \}|
\fi
\ifpdflatex
       \mbox{\newunicodechar}\{t\}\{\mbox{\newunicodechar}\{t\}\}\
       \new unicode char\{t\}\{\new unicode char\{t\}\}\}\
\fi
\ifpdflatex
       \mbox{\newunicodechar}\{u\}\{\mbox{\newunicodechar}\{u\}\}\}
       \verb|\newunicodechar| \{u\} \{\newunicodechar \{u\} \} \}
\fi
\ifpdflatex
       \verb|\newunicodechar| \{v\} \{ \texttt| v\} \}|
       \verb|\newunicodechar|{v}{\newunicodechar}{v}| \\
\fi
\ifpdflatex
       \verb|\newunicodechar| \{w\} \{ \texttt| \{w\} \} \}|
\else
       \fi
```

```
\ifpdflatex
             \new unicode char \{x\} \{\new unimpose x\} \}
             \mbox{\newunicodechar}{x}{\consumerath{\mathcal}{x}}}
\fi
\ifpdflatex
            \newunicodechar{y}{\ensuremath{y}}}
             \newunicodechar{y}{\ensuremath{\mathcal{y}}}}
 \fi
 \ifpdflatex
            \new unicode char \{z\} \{\new unimpose z\} \}
 \else
             \new unicode char \{z\} \{\new unit ode char \{z\}\} \}
 \fi
2.2.2 Uppercase latin
                                                                                                                                                                                                                                                                                                                                       complete
 %-----
 % Uppercase latin
 %-----
 \verb|\newunicodechar{$\mathcal{A}$}{\newunicodechar{$A$}}|
 \new unicode char \{\mathcal{B}\} \{\new unicode char \{\mathcal{B}\}\} \}
 \mbox{\codechar}{\mathcal{C}}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codechar}{\codecha
 \mbox{\newunicodechar}{\mathcal{D}}{\newunicodechar}{\mathbb{D}}}
 \new unicode char \{\mathcal{E}\} \{\new unicode char \{\mathcal{E}\}\} \}
 \verb|\newunicodechar{$\mathcal{F}$}{\newunicodechar{$\mathcal{F}$}}|
 \verb|\newunicodechar{G}| {\newunicodechar{G}}| \\
 \mbox{\newunicodechar}{\mathcal{H}}{\newunicodechar}{\mathcal{H}}}
 \new unicode char {\mathcal{I}}{\new unicode char {\mathcal{I}}} 
 \mbox{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar
 \mbox{\newunicodechar}{\mathcal{K}}{\newunicodechar}{\mathcal{K}}}
 \verb|\newunicodechar{$\mathcal{M}$}{\newunicodechar{$\mathbb{M}$}}|
 \label{eq:local_norm} $$\operatorname{N}_{\operatorname{N}}(\operatorname{Mathcal}_N)$$
 \mbox{\newunicodechar}{\mathcal{O}}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunico
 \verb|\newunicodechar{$\mathcal{P}$}{\newunicodechar{$\mathbb{P}$}}|
 \new unicode char {Q}{\new unicode char {Q}}{\new unicode char {Q}}}
 \mbox{\newunicodechar}{\mathcal{R}}{\newunicodechar}{\mathbb{R}}
```

```
\label{thm:codechar} $$ \operatorname{S}_{\operatorname{T}} \operatorname{T}} \ \operatorname{T}_{\operatorname{T}} \ \operatorname{T}_{\operatorname{T}} \ \operatorname{T}_{\operatorname{T}} \ \operatorname{T}_{\operatorname{T}}} \ \operatorname{T}_{\operatorname{T}}_{\operatorname{T}} \ \operatorname{T}_{\operatorname{T}}_{\operatorname{T}}} \ \operatorname{T}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}}_{\operatorname{T}
```

3 Other letters or letterlike symbols

 $\verb|\newunicodechar{$\ell$}{\newunicodechar{\normalfootnotemath{\newunicodechar{\normalfootnotemath{\normalfo$

4 Greek alphabet

4.1 Normal complete

```
\verb|\newunicodechar{}\alpha|{\newunicodechar{}\alpha|{\newunicodechar{}\alpha|}}|
\ifpdflatex
   \newunicodechar{A}{\ensuremath{A}}}
\else
  \new unicode char {A}{\new unicode char {A}}{\new unicode char {A}}{\new unicode char {A}}
\new unicode char {\beta}{\new unicode char {\beta}}
\ifpdflatex
   \verb|\newunicodechar{B}{\newunicodechar{B}}|
\else
   \newunicodechar{B}{\ensuremath{\Beta}}
\new unicode char \{\gamma\} \{\new unit math \{\gamma\}\}\
\new nicode char {\Gamma}{\new new nicode char {\Gamma}{\new new nicode char {\Gamma}}}
\verb|\newunicodechar{$\delta$}{\newunicodechar{$d$}}|
\verb|\newunicodechar{$\Delta$}{\newunicodechar{$\Delta$}}|
\verb|\newunicodechar{$\epsilon$}{\newunicodechar{$\epsilon$}}|
\ifpdflatex
   \new unicode char{E}{\new unicode char{E}}
   \mbox{\newunicodechar}{E}{\newunicodechar}
\fi
```

```
\new unicode char {\zeta}{\new unicode char}{\new unicode char}
 \ifpdflatex
                             \mbox{\newunicodechar}{Z}{\newunicodechar}
 \else
                           \new unicode char{Z}{\new unicode char{Z}}{\new unicode char{Z}}
\fi
 \newunicodechar{\eta}{\ensuremath{\eta}}
\ifpdflatex
                             \verb|\newunicodechar{H}{\newunicodechar{H}}| \\
 \else
                             \newunicodechar{H}{\ensuremath{\Eta}}
\fi
 \new unicode char \{\theta\} \{\new unimed \{\theta\}\}\}\
 \new unicode char {\Theta} {\new unicode char {\Theta
 \new unicode char \{\iota\} \{\new unicode char \{\iota\}\} \}
 \ifpdflatex
                             \newunicodechar{I}{\ensuremath{I}}
\else
                           \fi
 \new unicode char {\kappa}{\new unicode char {\kappa}}{\new unicode char {\kappa}
\ifpdflatex
                           \new unicode char \{K\} \{\new unicode char \{K\}\} \}
 \else
                             \mbox{\newunicodechar}{K}{\newunicodechar}
 \fi
 \new unicode char {\lambda}{\new unicode char {\lambda}}{\new unicode char {\lambda}
 \new nicode char {\Lambda}{\new new nicode char {\Lambda}{\new new nicode char {\Lambda}}{\new new nicode char {\Lambda}}{\new nicod
 \verb|\newunicodechar{$\mu$}{\newunicodechar{$\mu$}}|
 \ifpdflatex
                             \new unicode char \{M\} \{\new unimpose M\} \}
 \new unicode char \{\nu\} \{\nu\}\}\
\ifpdflatex
                           \newunicodechar{N}{\ensuremath{N}}}
 \else
                             \new unicode char{N}{\new unicode char{N}}
 \fi
```

```
\new unicode char \{\xi\} \{\new unicode char \{\xi\}\} \}
 \mbox{\newunicodechar}{\Xi}{\newunicodechar}{\Xi}{\newunicodechar}
\ifpdflatex
                \newunicodechar{o}{\ensuremath{o}}}
 \else
                \newunicodechar{o}{\ensuremath{\omicron}}}
\fi
\ifpdflatex
               \newunicodechar{O}{\ensuremath{0}}}
 \else
                \newunicodechar{O}{\ensuremath{\Omicron}}}
\fi
 \verb|\newunicodechar{$\pi$}{\newunicodechar{$\pi$}}|
 \mbox{\newunicodechar}{\Pi}{\consuremath}{\Pi}}
 \new unicode char {\rho}{\new unicode char {\rho}}{\new unicode char {\rho}
 \ifpdflatex
                \newunicodechar{P}{\ensuremath{P}}}
\else
                \new unicode char \{P\} {\new unicode char \{Rho\}}
\fi
 \new unicode char {\sigma}{\new unicode char {\sigma}{\new unicode char {\sigma}}}
 \new unicode char {\Sigma}{\new unicode char {\Sigma}{\new unicode char {\Sigma}}}
 \mbox{\newunicodechar}{\tau}{\consuremath{\tau}}
\ifpdflatex
                \verb|\newunicodechar{T}{\newunicodechar{T}}|
 \else
                \verb|\newunicodechar{T}{\newunicodechar{T}}| \\
 \fi
 \verb|\newunicodechar|{v}{\color=0}|
 \new unicode char {\Upsilon}{\new unicode char {\Upsilon}}{\new unicode char {\Upsilon}
 \verb|\newunicodechar{$\phi$}{\newunicodechar{$\phi$}}|
 \mbox{\newunicodechar}{\Phi}{\color{\Phi}}
 \mbox{\newunicodechar}{\chi}{\c nsuremath}{\c hi}}
 \ifpdflatex
               \verb|\newunicodechar{X}{\newunicodechar{X}}| \\
 \else
                \new unicode char {X}{\new unicode char {X}}{\new unicode char {X}}
\fi
 \mbox{\newunicodechar}{\psi}{\newunicodechar}{\psi}{\newunicodechar}{\psi}{\newunicodechar}{\psi}{\newunicodechar}{\psi}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{\newunicodechar}{
 \ \ensuremath{\Psi}{\ensuremath{\Psi}}
```

```
\label{eq:constraint} $$\operatorname{\omega}_{\sigma}(\Omega) = \operatorname{\omega}_{\sigma}^{\sigma} \ \operatorname{\omega}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_{\sigma}^{\sigma}_
```

4.2 var-variants

Note that some of the default Agda input entries are in this list, rather than the default above.

Also, varbeta is missing here; it requires a choice of some other package to add support for it.

```
\label{eq:constant} $$\operatorname{\varepsilon}_{\operatorname{\varepsilon}}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\operatorname{\varepsilon}}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{\varepsilon}^{\varepsilon}_{
```

5 Subscripts, superscripts, underscripts, and overscripts

Note that while the alphabetic lists are complete, **there are missing letters**, because unfortunately Unicode does not have characters for every letter subscript and superscript.

5.1 Subscripts

Note there are no uppercase letter subscripts.

5.1.1 Lowercase alphabet

```
\verb|\newunicodechar{|}_p}{\newunicodechar{|}_p}{\newunicodechar{|}_p}}|
\new unicode char \{_r\} \{\new unit math \{ \}_{r} \} \}
\verb|\newunicodechar{|}{\newunicodechar{|}{t}}| = math{{|}_{t}}|
\new unicode char \{u\} {\new unicode char \{u\} \}}
\verb|\newunicodechar|{|v|}{\newunicodechar}{|v|} \\
\new unicode char {x}{\new unicode char {x}}
5.1.2 Numeric
\newunicodechar{0}{\ensuremath{{}_{0}}}
\newunicodechar{1}{\ensuremath{{}_{1}}}
\verb|\newunicodechar{|}{\newunicodechar{|}{}}| \\
\newunicodechar{3}{\ensuremath{{}_{3}}}
\newunicodechar \{_4\} \{\newunicodechar \{_4\}\} \}
\newunicodechar{5}{\ensuremath{{}_{5}}}}
\newunicodechar{6}{\ensuremath{{}_{6}}}}
\newunicodechar{7}{\ensuremath{{}_{7}}}
\newunicodechar{q}{\ensuremath{{}_{9}}}}
5.1.3 Other
5.2
     Superscripts
5.2.1 Uppercase alphabet
```

 $\label{thm:codechar} $$ \operatorname{B}_{\ensuremath}_{?^{B}}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{?^{D}}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{?^{D}}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{?^{E}}} \rightarrow \operatorname{C}_{C}_{\ensuremath}_{?^{G}}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{?^{G}}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{\ensuremath}_{?^{G}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{\ensuremath}_{?^{G}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{\ensuremath}_{?^{G}} \rightarrow \operatorname{C}_{D}_{\ensuremath}_{\ensure$

```
\label{eq:condition} $$\operatorname{O}_{\operatorname{P}}_{\operatorname{P}}^{0}} \rightarrow \mathbb{I}^{0}} \rightarrow \mathbb{I
```

5.2.2 Lowercase alphabet

```
\newnicodechar{b}{\newnicodechar{b}}{\newnicodechar{b}}{\newnicodechar{b}}}
\new unicode char \{^c\} \{\new unimed \{^c\} \} \}
\new unicode char \{e\} {\new unicode char \{e\} \}}
\new unicode char \{f\} \{\new unimpose for each fixed fixed for each fixed for each fixed for each fixed fixed for each fixed 
 \new unicode char \{g\} \{\new unit = \{g\} \} \}
 \new unicode char {h}{\new unicode char {h}}{\new unicode char {h}
\new unicode char \{i\} \{\new unimpose \} \}
 \new unicode char \{j\} \{\new unit = \{j\}\} \}
\newunicodechar\{l\}{\ensuremath\{\{\}^{1}\}}
\new unicode char \{^n\} \{\new unit math \{\{\}^{n}\}\} \}
 \new unicode char \{^{o}\} \{\new unicode char \{^{o}\}\} \}
\new unicode char \{^r\} \{\new unicode char \{^r\} \} \}
\new unicode char {s}{\new unicode char {s}}{\new unicode char {s}}}
 \new unicode char \{^t\} \{\new unith \{\{\}^{t}\}\} \}
\new unicode char \{u\} \{\new unicode char \{u\} \} \}
 \verb|\newunicodechar| \{v\} \{ \newunited \{ \}^{v} \} \}
 \verb|\newunicodechar| \{^w\} \{ \texttt| \newunicodechar| \{^w\} \} \}
\new unicode char \{y\} \{\new unit math \{\{\}^{y}\}\} \}
```

5.2.3 Numeric

```
\newunicodechar{0}{\ensuremath{{}^{0}}}
\newunicodechar{1}{\ensuremath{{}^{1}}}}
```

5.2.4 Other

6 Punctuation and delimiters

6.1 Dots

```
\newunicodechar{...}{\ensuremath{\ldots}}
\newunicodechar{...}{\ensuremath{\cdots}}
\newunicodechar{:}{\ensuremath{\vdots}}
```

6.2 Dashes

```
\newunicodechar{-}{\ensuremath{\text{--}}}
\newunicodechar{--}{\ensuremath{\text{---}}}
```

6.3 Parentheses, braces and brackets

Note there are a few different braces I translate the same way. Braces and parentheses themselves are special characters in Agda, so they cannot be used in names.

```
\newunicodechar{{}{\ensuremath{\{}}}
\newunicodechar{{}}{\ensuremath{\}}}}
```

6.4 Other paired delimiters

6.5 Whitespace

Non-breaking space. Though it may appear as a normal space, it is in fact a \sim in the LaTeX —in classic LaTeX one writes \setminus ,.

```
\newunicodechar{ }{\ensuremath{~}}
```

I am a very long line whose words are separated by non-breaking spaces so I should run off the page at

7 Logic

7.1 Quantifiers

```
\label{thm:codechar} $$\operatorname{dechar}{\forall }{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densuremath}{\operatorname{densurema}
```

7.2 Boolean algebra

7.3 Entailment

```
\newunicodechar{\\-}{\ensuremath{\vdash}}
\newunicodechar{\\-}{\ensuremath{\dashv}}
\newunicodechar{\\-}{\ensuremath{\vDash}}}
```

8 Sets, relations and functions

8.1 Sets

```
\label{thm:post} $$ 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_{\emptyset}}_{\operatorname{den}_{\emptyset}}_{\operatorname{den}_{\emptyset}}_{\operatorname{den}_{\emptyset}}_{\operatorname{den}_{\emptyset}
```

8.2 Relation operators

```
\label{thm:linear_label} $$\operatorname{T}_{\operatorname{top}} \rightarrow \operatorname{th}_{\cot} $$\operatorname{L}_{\operatorname{thm}_{\cot}} \rightarrow \operatorname{L}_{\operatorname{thm}_{\cot}} $$\operatorname{L}_{\operatorname{thm}_{\cot}} $$\operatorname{L}_{\operatorname{thm}_{\cot}} $$\operatorname{L}_{\operatorname{thm}_{\cot}} $$\operatorname{L}_{\operatorname{thm}_{\cot}} $$\operatorname{L}_{\operatorname{thm}_{\cot}} $$
```

8.3 Function operators

\newunicodechar{0}{\ensuremath{\circ}}

8.4 Relations

8.4.1 Equality like

Along with negations where they exist. Note that equivalences are within the 7 section.

```
\label{thm:cong} $$ \operatorname{2}{\operatorname{2}}{\operatorname{2}} \n \codechar{2}{\operatorname{2}} \n \codehar{2}{\operatorname{2}} \n \codehar{2}{\operatorname{2}} \n \codehar{2} \n \codehar{2}{\operatorname{2}} \n \codehar{2} \n \codehar{2}{\operatorname{2}} \n \codehar{2} \n \codehar{2
```

8.4.2 Order like

```
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\newunicodechar{\geq}\\ensuremath{\geq}}
\newunicodechar{\\overline{\\ngeq}}
\newunicodechar{\place\}{\ensuremath{\nless}}
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\newunicodechar{≲}{\ensuremath{\lesssim}}
\newunicodechar{≳}{\ensuremath{\gtrsim}}
\newunicodechar{□}{\ensuremath{\sqsubset}}
\newunicodechar{\( \sq\) }\ensuremath{\sq\\sq\}
\newunicodechar{\Begin{aligned} \\ \text{\sqsupset}\}
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\newunicodechar{|}{\ensuremath{\mid}}
```

9 Generic or other operators

9.1 Arrows

9.2 "o"-operators

9.3 Others

Probably some of these belong somewhere else.

10 Check and X-marks