The unicode-math test suite

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Preamble

The following pieces of output are generated from the code shown. As well as being good minimal examples, these tests are useful to ensure that new bugs don't affect old behaviour. When the test suite is run, the new output is compared pixel by pixel with that shown here and warnings produced if the outputs are not identical.

1 Test 001a

\input{umtest-preamble}
\usepackage[math-style=TeX]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINtext\]
\[\latintext\]
\[\LATINmath\]
\[\latinmath\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

2 Test 001b

\input{umtest-preamble}
\usepackage[math-style=ISO]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINtext\]
\[\latintext\]
\[\LATINmath\]
\[\latinmath\]
\end{document}

3 Test 001c

```
\input{umtest-preamble}
\usepackage[math-style=literal]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINtext\]
\[\LATINmath\]
\[\latinmath\]
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

4 Test 001d

```
\input{umtest-preamble}
\usepackage[math-style=French]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINtext\]
\[\LATINmath\]
\[\latinmath\]
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

5 Test 002a

```
\input{umtest-preamble}
\usepackage[math-style=TeX]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\GREEKtext\]
\[\greektext\]
\[\GREEKmath\]
\[\greekmath\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω

6 Test 002b

```
\input{umtest-preamble}
\usepackage[math-style=ISO]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\GREEKtext\]
\[\greektext\]
\[\greektext\]
\[\greekmath\]
\[\greekmath\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω

7 Test 002c

```
\input{umtest-preamble}
\usepackage[math-style=literal]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\GREEKtext\]
\[\greektext\]
\[\GREEKmath\]
\[\greekmath\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω

8 Test 002d

```
\input{umtest-preamble}
\usepackage[math-style=French]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\GREEKtext\]
\[\greektext\]
\[\GREEKmath\]
\[\greekmath\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω

9 Test 010a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathscr{\LATINtext}\]
\[\mathscr{\latintext}\]
\[\mathscr{\LATINmath}\]
\[\mathscr{\latinmath}\]
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

10 Test 010b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathscr\]
\[\latinmathscr\]
\[\reservedmathscr\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

11 Test 010c

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathfrak{\LATINtext}\]
\[\mathfrak{\latintext}\]
\[\mathfrak{\LATINmath}\]
\[\mathfrak{\latinmath}\]
\end{document}

ABCDEFGHIJKImnopakstuvwxy3

ABCDEFGHIJKImnopakstuvwxy3

ABCDEFGHIJKImnopakstuvwxy3

abcdefghijkImnopakstuvwxy3

12 Test 010d

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathfrak\]
\[\latinmathfrak\]
\[\reservedmathfrak\]
\end{document}

UBCDEFGHIJKLMNDPQHSTUBWXY3

abcdefghijtlmnopqrstubwxy3

13 Test 011a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathup{\LATINtext}\]
\[\mathup{\latintext}\]
\[\mathup{\LATINmath}\]
\[\mathup{\latinmath}\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

14 Test 011b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathup{\GREEKtext}\]
\[\mathup{\greektext}\]
\[\mathup{\GREEKmath}\]
\[\mathup{\greekmath}\]
\end{document}

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΎΦΧΨ Ω αβγδεεζηθθικκλμνξοπ ϖ ροςστυφφχψ ω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΎΦΧΨ Ω

αβγδεεζηθθικκλμνξοπωροςστυφφχψω

15 Test 012a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathit{\LATINtext}\]
\[\mathit{\latintext}\]
\[\mathit{\LATINmath}\]
\[\mathit{\latinmath}\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

16 Test 012b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathit{\GREEKtext}\]
\[\mathit{\greektext}\]
\[\mathit{\GREEKmath}\]
\[\mathit{\greekmath}\]
\end{document}

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωρρςςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωρρςςστυφφχψω

17 Test 013a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbb{\LATINtext}\]
\[\mathbb{\latintext}\]
\[\mathbb{\LATINmath}\]
\[\mathbb{\latinmath}\]
\end{document}

18 Test 013b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbb{0123456789}\]
\[\numbersmathbb\]
\end{document}

0123456789 0123456789

19 Test 013c

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathbb\]
\[\latinmathbb\]
\[\reservedmathbb\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

20 Test 014a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathsfup{\LATINtext}\]
\[\mathsfup{\latintext}\]
\[\mathsfup{\LATINmath}\]
\[\mathsfup{\latinmath}\]
\end{document}

21 Test 014b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathsfup{0123456789}\]
\[\numbersmathsfup\]
\end{document}

0123456789 0123456789

22 Test 014c

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathsfup\]
\[\latinmathsfup\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

23 Test 015a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathsfit{\LATINtext}\]
\[\mathsfit{\latintext}\]
\[\mathsfit{\LATINmath}\]
\[\mathsfit{\latinmath}\]
\[\mathsfit{0123456789}\]
\end{document}

24 Test 015b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathsfit\]
\[\latinmathsfit\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

25 Test 016a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\mathtt{\LATINtext}\]
\[\mathtt{\latintext}\]
\[\mathtt{\LATINmath}\]
\[\mathtt{\latinmath}\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

26 Test 016b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\mathtt{0123456789}\]
\[\numbersmathtt\]
\end{document}

0123456789

0123456789

27 Test 016c

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\LATINmathtt\]
\[\latinmathtt\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

28 Test 017a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfscr{\LATINtext}\]
\[\mathbfscr{\latintext}\]
\[\mathbfscr{\LATINmath}\]
\[\mathbfscr{\latinmath}\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

29 Test 017b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathbfscr\]
\[\latinmathbfscr\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

30 Test 017c

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbffrak{\LATINtext}\]
\[\mathbffrak{\LATINmath}\]
\[\mathbffrak{\LATINmath}\]
\[\mathbffrak{\latinmath}\]
\end{document}

ABEDEFEHIJKLMNOPQRSTUBWXY3

ABEDEFEHIJKLMNOPQRSTUBWXY3

abcdefghijflmnopqrstubwxy3

31 Test 017d

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\LATINmathbffrak\]
\[\latinmathbffrak\]
\end{document}

ABEDEFGHIJKUMNDHORSTUBWXYZ

abcdefghijKlmnopqrstuvwxyz

32 Test 018a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfup{\LATINtext}\]
\[\mathbfup{\latintext}\]
\[\mathbfup{\LATINmath}\]
\[\mathbfup{\latinmath}\]
\[\mathbfup{0123456789}\]
\end{document}

33 Test 018b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfup{\GREEKtext}\]
\[\mathbfup{\GREEKmath}\]
\[\mathbfup{\greekmath}\]
\end{document}

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω

34 Test 019a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfit{\LATINtext}\]
\[\mathbfit{\latintext}\]
\[\mathbfit{\LATINmath}\]
\[\mathbfit{\latinmath}\]
\[\mathbfit{0123456789}\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789

35 Test 019b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfit{\GREEKtext}\]
\[\mathbfit{\GREEKmath}\]
\[\mathbfit{\GREEKmath}\]
\[\mathbfit{\greekmath}\]
\end{document}

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω

36 Test 020a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfsfit{\LATINtext}\]
\[\mathbfsfit{\LATINmath}\]
\[\mathbfsfit{\latinmath}\]
\[\mathbfsfit{\latinmath}\]
\[\mathbfsfit{0123456789}\]
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

0123456789

37 Test 020b

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{STIXGeneral-Bold}
\begin{document}
\[\mathbfsfup{\GREEKtext}\]
\[\mathbfsfup{\greektext}\]
\[\mathbfsfup{\GREEKmath}\]
\[\mathbfsfup{\greekmath}\]
\end{document}

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΎΦΧΨΩ αβγδεεζηθδικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΎΦΧΨΩ αβγδεεζηθδικκλμυξοπωροςστυφφχψω

38 Test 021a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbfsfit{\LATINtext}\]
\[\mathbfsfit{\LATINmath}\]
\[\mathbfsfit{\latinmath}\]
\[\mathbfsfit{\0123456789}\]
\end{document}

39 Test 021b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{STIXGeneral-BoldItalic}
\begin{document}
\[\mathbfsfit{\GREEKtext}\]
\[\mathbfsfit{\GREEKmath}\]
\[\mathbfsfit{\greekmath}\]
\[\mathbfsfit{\greekmath}\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθδικκλμυξοπωρος στυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθδικκλμυξοπωρος στυφφχψω

40 Test 100a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \left( \left
```

 $\left(\left(\left(\left(\left(\left(x^2\right)^2\right)^2\right)^2\right)^2\right)$

41 Test 100b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \left[ \left[ \left[ \left[ \left[ \right]^2 \right]^2
```

 $\left[\left[\left[\left[\left[x^2 \right]^2 \right]^2 \right]^2 \right]^2 \right]$

42 Test 100c

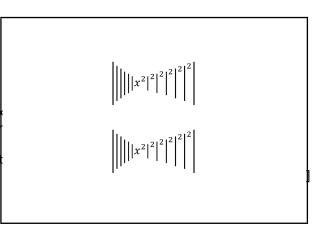
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\left\{ \left\{ \left\{ \left\{ \left\} \left\}^2 \right\}^2 \r

 $\left\{ \left\{ \left\{ \left\{ \left\{ \left\{ x^{2}\right\} ^{2}\right\} ^{2}\right\} ^{2}\right\} ^{2}\right\} ^{2}\right\}$

43 Test 100d

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\left| \left| \left| \left| \left| \right|^2 \right|^2

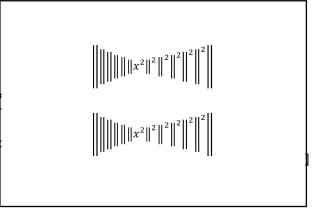
\[\left\vert \left\vert \left\vert
\right\vert^2 \right\vert^2 \right\vert^2
\end{document}



44 Test 100e

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\left2 \left2 \left2 \left2 \left2 \left2 \right2^2 \r

\[\left\Vert \left\Vert \left\Vert
\right\Vert^2 \right\Vert^2 \right\Vert^2
\end{document}



45 Test 150a

```
\input{umtest-preamble}
\usepackage{amsmath,unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\centerline{$\int\quad\idotsint$}
\[\int\quad\idotsint\]
\end{document}
```

∫ ∫...∫

46 Test 151a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \hat i \qquad \hat x \qquad \hat M \qquad \
[ \widehat i \qquad \widehat x \qquad \widehat \
[ \tilde i \qquad \tilde x \qquad \tilde M \q\
\[ \widetilde i \qquad \widetilde x \qquad \wi\end{document}
```

```
\hat{i} \quad \hat{x} \quad \hat{M} \quad \widehat{x+y} \\
\hat{i} \quad \hat{x} \quad \hat{M} \quad \widehat{x+y} \\
\tilde{i} \quad \tilde{x} \quad \tilde{M} \quad \widehat{x+y} \\
\tilde{i} \quad \tilde{x} \quad \tilde{M} \quad \widehat{x+y}
```

47 Test 200a

```
\input{umtest-preamble}
\usepackage{amsmath,unicode-math}
\setmathfont{Cambria Math}
\begin{document}
    [${x\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prime\prim
```

```
[x'''] [x''''] [x'] [x'''] [x''''] [x'''] [x'''']
```

48 Test 201a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \sqrt{\\sin^{2}x+\\cos^{2}x\}=1 \]
\[ \sqrt{1+\\sqrt{1+\\sqrt{1+\\sqrt{1+x}}}\]
\end{document}
```

$\sqrt{\sin^2 x + \cos^2 x} = 1$ $\sqrt{1 + \sqrt{1 + \sqrt{1 + x}}}$

49 Test 202a

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[a\colon b\qquad a: b
 \qquad a^^^2236 b\]
\end{document}

a:b a:b a:b

50 Test 202b

\input{umtest-preamble}
\usepackage[colon=literal]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[a\colon b\qquad a: b
 \qquad a^^^2236 b\]
\end{document}

$$a:b$$
 $a:b$ $a:b$

51 Test 203a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[a-b\]
\[a\minus b\]
\end{document}
```

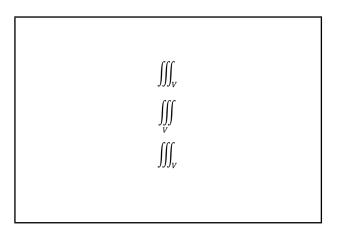
a - b a - b

52 Test 204a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\setlength\parskip{12pt}
\begin{document}
$x_{012}$ $x_{123}$ $x_{234}$ $x_{345}$ $x_{456}$ $x_{567}$ $x_{67}$
$x_{9+-}$ $x_{+-($ $x_{-(=$ $x_{(=)}$ $x_{=)}?}$ $x_{2}?$ $x_{2}?$
$x_{0?}+)_{?}^{2}$ $x_{2}^{2}$ $x_{2}^{2}$ $x_{2}^{2}+)_{?}^{2}$
\$x_{34}^{2}+)_{?}^{2}$ \end{document}
```

$$x_{012} \ x_{123} \ x_{234} \ x_{345} \ x_{456} \ x_{567} \ x_{678} \ x_{789} \ x_{89+}$$
 $x_{9+-} \ x_{+-(} \ x_{-(=} \ x_{(=)} \ x_{=)a} \ x_{)ae} \ x_{aeo} \ x_{eox} \ x_{ox0} \ x_{x01}$
 $x^{0i+)n^2} \ x^{i+)n^2} \ x^{n^2} \ x^{2i+)n}$
 $x^{2i+)n}$

53 Test 205a



54 Test 500a

```
\label{lem:continuous} $$ \sup_{s \in \mathbb{R} \cap \mathbb{C} \cap \mathbb{
```