

# 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}  
\[ \text{LATINtext} \]  
[ \text{latin} ]  
[ \text{LATINmath} ]  
[ \text{latin} ]  
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

### 2 Test 001b

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

### 3 Test 001c

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*

### 4 Test 001d

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*

### 5 Test 001e

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*

## 6 Test 002a

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

ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*αβγδεζηθικλμνξοπρρςστυφφχψω*  
ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*αβγδεζηθικλμνξοπρρςστυφφχψω*

## 7 Test 002b

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

*ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεζηθικλμνξοπρρςστυφφχψω*  
*ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεζηθικλμνξοπρρςστυφφχψω*

## 8 Test 002c

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

ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*αβγδεζηθικλμνξοπρρςστυφφχψω*  
*ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεζηθικλμνξοπρρςστυφφχψω*

## 9 Test 002d

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

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω  
ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω

## 10 Test 002e

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

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω  
ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω

## 11 Test 003a

```
\input{umtest-preamble}  
\usepackage[bold-style=TeX]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\LATINmathbfup\  
\[\LATINmathbfit\  
\[\latinmathbfup\  
\[\latinmathbfit\  
\[\numbersmathbfup\  
\end{document}
```

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**abcdefghijklmnopqrstuvwxyz**  
**0123456789**

## 12 Test 003b

```
\input{umtest-preamble}
\usepackage[bold-style=TeX]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbf{GREEKmathbfup}\]
\[\mathbf{GREEKmathbfit}\]
\[\mathbf{greekmathbfup}\]
\[\mathbf{greekmathbfit}\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*αβγδεζηθθικκλμνξοπωρρςστυφφχψω*  
*αβγδεζηθθικκλμνξοπωρρςστυφφχψω*

## 13 Test 003c

```
\input{umtest-preamble}
\usepackage[bold-style=TeX]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbf{LATINmath}\]
\[\mathbf{LATINtext}\]
\[\mathbf{latinmath}\]
\[\mathbf{latintext}\]
\[\mathbf{0123456789}\]
\end{document}
```

ΑΒΓΔΕΖΗΘΙΚΛΜΝΟΠΡΣΤΥVWXYZ  
ΑΒΓΔΕΖΗΘΙΚΛΜΝΟΠΡΣΤΥVWXYZ  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
0123456789

## 14 Test 003d

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

ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*αβγδεζηθθικκλμνξοπωρρςστυφφχψω*  
*αβγδεζηθθικκλμνξοπωρρςστυφφχψω*

## 15 Test 003e

```
\input{umtest-preamble}
\usepackage[bold-style=ISO]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbf{A}\mathbf{B}\mathbf{C}\mathbf{D}\mathbf{E}\mathbf{F}\mathbf{G}\mathbf{H}\mathbf{I}\mathbf{J}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{O}\mathbf{P}\mathbf{Q}\mathbf{R}\mathbf{S}\mathbf{T}\mathbf{U}\mathbf{V}\mathbf{W}\mathbf{X}\mathbf{Y}\mathbf{Z}\]
\[\mathbf{A}\mathbf{B}\mathbf{C}\mathbf{D}\mathbf{E}\mathbf{F}\mathbf{G}\mathbf{H}\mathbf{I}\mathbf{J}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{O}\mathbf{P}\mathbf{Q}\mathbf{R}\mathbf{S}\mathbf{T}\mathbf{U}\mathbf{V}\mathbf{W}\mathbf{X}\mathbf{Y}\mathbf{Z}\]
\[\mathbf{a}\mathbf{b}\mathbf{c}\mathbf{d}\mathbf{e}\mathbf{f}\mathbf{g}\mathbf{h}\mathbf{i}\mathbf{j}\mathbf{k}\mathbf{l}\mathbf{m}\mathbf{n}\mathbf{o}\mathbf{p}\mathbf{q}\mathbf{r}\mathbf{s}\mathbf{t}\mathbf{u}\mathbf{v}\mathbf{w}\mathbf{x}\mathbf{y}\mathbf{z}\]
\[\mathbf{a}\mathbf{b}\mathbf{c}\mathbf{d}\mathbf{e}\mathbf{f}\mathbf{g}\mathbf{h}\mathbf{i}\mathbf{j}\mathbf{k}\mathbf{l}\mathbf{m}\mathbf{n}\mathbf{o}\mathbf{p}\mathbf{q}\mathbf{r}\mathbf{s}\mathbf{t}\mathbf{u}\mathbf{v}\mathbf{w}\mathbf{x}\mathbf{y}\mathbf{z}\]
\[\mathbf{0}\mathbf{1}\mathbf{2}\mathbf{3}\mathbf{4}\mathbf{5}\mathbf{6}\mathbf{7}\mathbf{8}\mathbf{9}\]
\end{document}
```

***ABCDEFGHIJKLMNOPQRSTUVWXYZ***  
***ABCDEFGHIJKLMNOPQRSTUVWXYZ***  
***abcdefghijklmnopqrstuvwxyz***  
***abcdefghijklmnopqrstuvwxyz***  
**0123456789**

## 16 Test 003f

```
\input{umtest-preamble}
\usepackage[bold-style=ISO]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbf{A}\mathbf{B}\mathbf{\Gamma}\mathbf{\Delta}\mathbf{E}\mathbf{Z}\mathbf{H}\mathbf{\Theta}\mathbf{I}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{\Xi}\mathbf{O}\mathbf{P}\mathbf{R}\mathbf{\Sigma}\mathbf{T}\mathbf{Y}\mathbf{\Phi}\mathbf{X}\mathbf{\Psi}\mathbf{\Omega}\]
\[\mathbf{A}\mathbf{B}\mathbf{\Gamma}\mathbf{\Delta}\mathbf{E}\mathbf{Z}\mathbf{H}\mathbf{\Theta}\mathbf{I}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{\Xi}\mathbf{O}\mathbf{P}\mathbf{R}\mathbf{\Sigma}\mathbf{T}\mathbf{Y}\mathbf{\Phi}\mathbf{X}\mathbf{\Psi}\mathbf{\Omega}\]
\[\mathbf{\alpha}\mathbf{\beta}\mathbf{\gamma}\mathbf{\delta}\mathbf{\epsilon}\mathbf{\zeta}\mathbf{\eta}\mathbf{\theta}\mathbf{\iota}\mathbf{\kappa}\mathbf{\lambda}\mathbf{\mu}\mathbf{\nu}\mathbf{\xi}\mathbf{o}\mathbf{p}\mathbf{\omega}\mathbf{\rho}\mathbf{\sigma}\mathbf{\tau}\mathbf{\upsilon}\mathbf{\phi}\mathbf{\chi}\mathbf{\psi}\mathbf{\omega}\]
\[\mathbf{\alpha}\mathbf{\beta}\mathbf{\gamma}\mathbf{\delta}\mathbf{\epsilon}\mathbf{\zeta}\mathbf{\eta}\mathbf{\theta}\mathbf{\iota}\mathbf{\kappa}\mathbf{\lambda}\mathbf{\mu}\mathbf{\nu}\mathbf{\xi}\mathbf{o}\mathbf{p}\mathbf{\omega}\mathbf{\rho}\mathbf{\sigma}\mathbf{\tau}\mathbf{\upsilon}\mathbf{\phi}\mathbf{\chi}\mathbf{\psi}\mathbf{\omega}\]
\end{document}
```

***ABΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ***  
***ABΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ***  
***αβγδεζηθθικλμνξοπωρςστυφχψω***  
***αβγδεζηθθικλμνξοπωρςστυφχψω***

## 17 Test 003g

```
\input{umtest-preamble}
\usepackage[bold-style=ISO]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbf{A}\mathbf{B}\mathbf{C}\mathbf{D}\mathbf{E}\mathbf{F}\mathbf{G}\mathbf{H}\mathbf{I}\mathbf{J}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{O}\mathbf{P}\mathbf{Q}\mathbf{R}\mathbf{S}\mathbf{T}\mathbf{U}\mathbf{V}\mathbf{W}\mathbf{X}\mathbf{Y}\mathbf{Z}\]
\[\mathbf{A}\mathbf{B}\mathbf{C}\mathbf{D}\mathbf{E}\mathbf{F}\mathbf{G}\mathbf{H}\mathbf{I}\mathbf{J}\mathbf{K}\mathbf{L}\mathbf{M}\mathbf{N}\mathbf{O}\mathbf{P}\mathbf{Q}\mathbf{R}\mathbf{S}\mathbf{T}\mathbf{U}\mathbf{V}\mathbf{W}\mathbf{X}\mathbf{Y}\mathbf{Z}\]
\[\mathbf{a}\mathbf{b}\mathbf{c}\mathbf{d}\mathbf{e}\mathbf{f}\mathbf{g}\mathbf{h}\mathbf{i}\mathbf{j}\mathbf{k}\mathbf{l}\mathbf{m}\mathbf{n}\mathbf{o}\mathbf{p}\mathbf{q}\mathbf{r}\mathbf{s}\mathbf{t}\mathbf{u}\mathbf{v}\mathbf{w}\mathbf{x}\mathbf{y}\mathbf{z}\]
\[\mathbf{a}\mathbf{b}\mathbf{c}\mathbf{d}\mathbf{e}\mathbf{f}\mathbf{g}\mathbf{h}\mathbf{i}\mathbf{j}\mathbf{k}\mathbf{l}\mathbf{m}\mathbf{n}\mathbf{o}\mathbf{p}\mathbf{q}\mathbf{r}\mathbf{s}\mathbf{t}\mathbf{u}\mathbf{v}\mathbf{w}\mathbf{x}\mathbf{y}\mathbf{z}\]
\[\mathbf{0}\mathbf{1}\mathbf{2}\mathbf{3}\mathbf{4}\mathbf{5}\mathbf{6}\mathbf{7}\mathbf{8}\mathbf{9}\]
\end{document}
```

***ABCDEFGHIJKLMNOPQRSTUVWXYZ***  
***ABCDEFGHIJKLMNOPQRSTUVWXYZ***  
***abcdefghijklmnopqrstuvwxyz***  
***abcdefghijklmnopqrstuvwxyz***  
**0123456789**

## 18 Test 003h

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

**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
*αβγδεεζηθθικκλμνξοπωρρςστυφφχψω*  
*αβγδεεζηθθικκλμνξοπωρρςστυφφχψω*

## 19 Test 003i

```
\input{umtest-preamble}  
\usepackage[bold-style=upright]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\LATINmathbfup\]  
\[\LATINmathbfit\]  
\[\latinmathbfup\]  
\[\latinmathbfit\]  
\[\numbersmathbfup\]  
\end{document}
```

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**  
**abcdefghijklmnopqrstuvwxyz**  
**0123456789**

## 20 Test 003j

```
\input{umtest-preamble}  
\usepackage[bold-style=upright]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\GREEKmathbfup\]  
\[\GREEKmathbfit\]  
\[\greekmathbfup\]  
\[\greekmathbfit\]  
\end{document}
```

**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
*αβγδεεζηθθικκλμνξοπωρρςστυφφχψω*  
*αβγδεεζηθθικκλμνξοπωρρςστυφφχψω*

## 21 Test 003k

```
\input{umtest-preamble}  
\usepackage[bold-style=upright]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\mathbf{LATINmath}\]  
\[\mathbf{LATINtext}\]  
\[\mathbf{latinmath}\]  
\[\mathbf{latintext}\]  
\[\mathbf{0123456789}\]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxy  
abcdefghijklmnopqrstuvwxy  
0123456789

## 22 Test 003l

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

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω  
αβγδεζηθικλμνξοπρρςστυφφχψω

## 23 Test 003m

```
\input{umtest-preamble}  
\usepackage[bold-style=literal]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\LATINmathbfup\]  
\[\LATINmathbfifit\]  
\[\latinmathbfup\]  
\[\latinmathbfifit\]  
\[\numbersmathbfup\]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
abcdefghijklmnopqrstuvwxy  
*abcdefghijklmnopqrstuvwxy*  
0123456789

## 24 Test 003n

```
\input{umtest-preamble}  
\usepackage[bold-style=literal]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\GREEKmathbfup\  
\[\GREEKmathbfit\  
\[\greekmathbfup\  
\[\greekmathbfit\  
\end{document}
```

**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
*αβγδεζηθθικλμνξοπρρςστυφφχψω*  
*αβγδεζηθθικλμνξοπρρςστυφφχψω*

## 25 Test 003o

```
\input{umtest-preamble}  
\usepackage[bold-style=literal]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\mathbf\{LATINmath\  
\[\mathbf\{LATINtext\  
\[\mathbf\{latinmath\  
\[\mathbf\{latintext\  
\[\mathbf\{0123456789\  
\end{document}
```

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
**0123456789**

## 26 Test 003p

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

**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
**ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
*αβγδεζηθθικλμνξοπρρςστυφφχψω*  
*αβγδεζηθθικλμνξοπρρςστυφφχψω*

## 27 Test 004a

```
\input{umtest-preamble}  
\usepackage[sans-style=upright]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\backslash\mathrm{LATINmathsfup}\]  
\[\backslash\mathrm{LATINmathsfit}\]  
\[\backslash\mathrm{latinmathsfup}\]  
\[\backslash\mathrm{latinmathsfit}\]  
\[\backslash\mathrm{numbersmathsfup}\]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

## 28 Test 004b

```
\input{umtest-preamble}  
\usepackage[sans-style=upright]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\backslash\mathrm{mathsf}\backslash\mathrm{LATINtext}\]  
\[\backslash\mathrm{mathsf}\backslash\mathrm{LATINmath}\]  
\[\backslash\mathrm{mathsf}\backslash\mathrm{latintext}\]  
\[\backslash\mathrm{mathsf}\backslash\mathrm{latinmath}\]  
\[\backslash\mathrm{mathsf}\backslash\mathrm{0123456789}\]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

## 29 Test 004c

```
\input{umtest-preamble}  
\usepackage[sans-style=italic]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\backslash\mathrm{LATINmathsfup}\]  
\[\backslash\mathrm{LATINmathsfit}\]  
\[\backslash\mathrm{latinmathsfup}\]  
\[\backslash\mathrm{latinmathsfit}\]  
\[\backslash\mathrm{numbersmathsfup}\]  
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
0123456789

### 30 Test 004d

```
\input{umtest-preamble}  
\usepackage[sans-style=italic]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\mathsf{\text{A}}\]  
\[\mathsf{\text{B}}\]  
\[\mathsf{\text{C}}\]  
\[\mathsf{\text{D}}\]  
\[\mathsf{0123456789}\]  
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
0123456789

### 31 Test 004e

```
\input{umtest-preamble}  
\usepackage[sans-style=literal]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\text{A}\]  
\[\text{B}\]  
\[\text{C}\]  
\[\text{D}\]  
\[\text{0123456789}\]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

### 32 Test 004f

```
\input{umtest-preamble}  
\usepackage[sans-style=literal]{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\mathsf{\text{A}}\]  
\[\mathsf{\text{B}}\]  
\[\mathsf{\text{C}}\]  
\[\mathsf{\text{D}}\]  
\[\mathsf{0123456789}\]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

### 33 Test 005a

```
\input{umtest-preamble}  
\usepackage[sans-style=upright]{unicode-math}  
\setmathfont{Code2001}  
\begin{document}  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

### 34 Test 005b

```
\input{umtest-preamble}  
\usepackage[sans-style=upright]{unicode-math}  
\setmathfont{Code2001}  
\begin{document}  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\end{document}
```

ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
ΑΒΓΔΕΖΗΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικιλμνξοπρρςστυφθχψω  
αβγδεζηθικιλμνξοπρρςστυφθχψω

### 35 Test 005c

```
\input{umtest-preamble}  
\usepackage[sans-style=upright]{unicode-math}  
\setmathfont{Code2001}  
\begin{document}  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\[ \mathbf{fup} \]  
\[ \mathbf{ffit} \]  
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

### 36 Test 005d

```
\input{umtest-preamble}
\usepackage[sans-style=upright]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\mathbfsf\GREEKmath\]
\[\mathbfsf\GREEKtext\]
\[\mathbfsf\greekmath\]
\[\mathbfsf\greektext\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
 ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
 αβγδεεζηθθικιλμνξοπαρρςστυφφχψω  
 αβγδεεζηθθικιλμνξοπαρρςστυφφχψω

### 37 Test 005e

```
\input{umtest-preamble}
\usepackage[sans-style=italic]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\LATINmathbfsfup\]
\[\LATINmathbfsfit\]
\[\latinmathbfsfup\]
\[\latinmathbfsfit\]
\[\numbersmathbfsfup\]
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
 0123456789

### 38 Test 005f

```
\input{umtest-preamble}
\usepackage[sans-style=italic]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\GREEKmathbfsfup\]
\[\GREEKmathbfsfit\]
\[\greekmathbfsfup\]
\[\greekmathbfsfit\]
\end{document}
```

*ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεεζηθθικιλμνξοπαρρςστυφθχψω*  
*αβγδεεζηθθικιλμνξοπαρρςστυφθχψω*

## 39 Test 005g

```
\input{umtest-preamble}
\usepackage[sans-style=italic]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\mathbfsf\LATINmath\]
\[\mathbfsf\LATINtext\]
\[\mathbfsf\latinmath\]
\[\mathbfsf\latintext\]
\[\mathbfsf{0123456789}\]
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
0123456789

## 40 Test 005h

```
\input{umtest-preamble}
\usepackage[sans-style=italic]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\mathbfsf\GREEKmath\]
\[\mathbfsf\GREEKtext\]
\[\mathbfsf\greekmath\]
\[\mathbfsf\greektext\]
\end{document}
```

*ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεεζηθθικιμνξοπωρρςστυφφχψω*  
*αβγδεεζηθθικιμνξοπωρρςστυφφχψω*

## 41 Test 005i

```
\input{umtest-preamble}
\usepackage[sans-style=literal]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\LATINmathbfsfup\]
\[\LATINmathbfsfit\]
\[\latinmathbfsfup\]
\[\latinmathbfsfit\]
\[\numbersmathbfsfup\]
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
abcdefghijklmnopqrstuvwxyz  
0123456789

## 42 Test 005j

```
\input{umtest-preamble}
\usepackage[sans-style=literal]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\GREEKmathbbsfup\]
\[\GREEKmathbbsffit\]
\[\greekmathbbsfup\]
\[\greekmathbbsffit\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
αβγδεεζηθθικιμνξοπαρρςστυφθχψω  
*αβγδεεζηθθικιμνξοπαρρςστυφθχψω*

## 43 Test 005k

```
\input{umtest-preamble}
\usepackage[sans-style=literal]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\mathbbsf\LATINmath\]
\[\mathbbsf\LATINtext\]
\[\mathbbsf\latinmath\]
\[\mathbbsf\latintext\]
\[\mathbbsf{0123456789}\]
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
*abcdefghijklmnopqrstuvwxyz*  
abcdefghijklmnopqrstuvwxyz  
0123456789

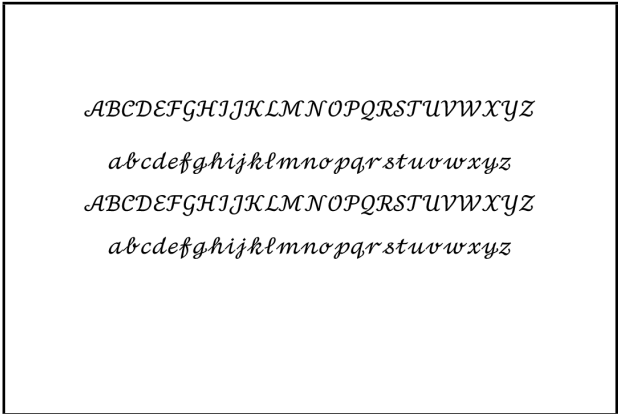
## 44 Test 005l

```
\input{umtest-preamble}
\usepackage[sans-style=literal]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[\mathbbsf\GREEKmath\]
\[\mathbbsf\GREEKtext\]
\[\mathbbsf\greekmath\]
\[\mathbbsf\greektext\]
\end{document}
```

*ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
*αβγδεεζηθθικιμνξοπαρρςστυφθχψω*  
*αβγδεεζηθθικιμνξοπαρρςστυφθχψω*

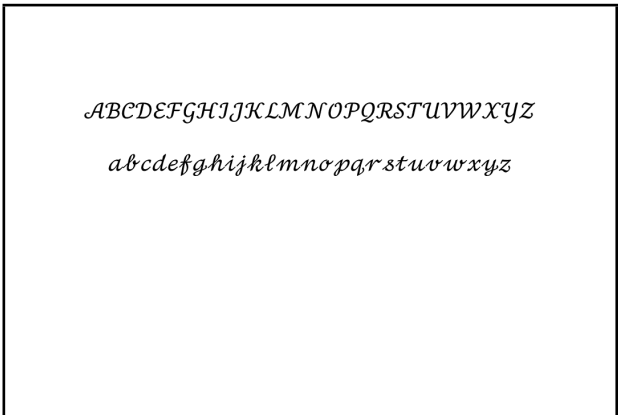
45    Test 010a

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



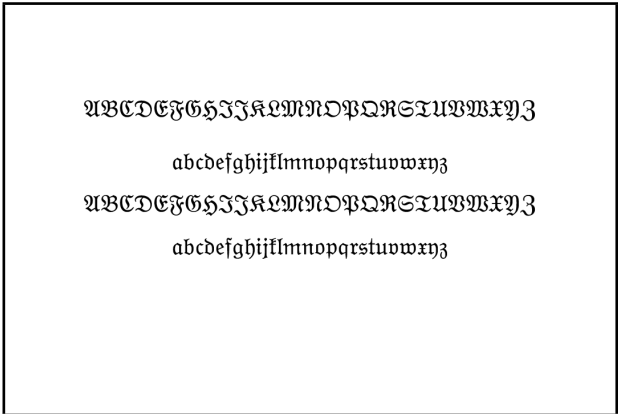
46    Test 010b

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



47    Test 010c

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



48    **Test 010d**

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

49    **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

50    **Test 011b**

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

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεζηθικλμνξοπρρςστυφφχψω

ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεζηθικλμνξοπρρςστυφφχψω

## 51 Test 012a

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*

*abcdefghijklmnopqrstuvwxyz*

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*

*abcdefghijklmnopqrstuvwxyz*

## 52 Test 012b

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

*ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*

*αβγδεζηθικλμνξοπρρςστυφχψω*

*ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*

*αβγδεζηθικλμνξοπρρςστυφχψω*

## 53 Test 013a

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*

*abcdefghijklmnopqrstuvwxyz*

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*

*abcdefghijklmnopqrstuvwxyz*

54 Test 013b

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

0123456789

0123456789

55 Test 013c

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

56 Test 013d

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{STIXGeneral}
\begin{document}
\[\mathbb{\pi\Gamma}\quad\mathbb{????}\]
\[\mathbb{\sum}_0^1\]
\[\mathbb{\Sigma}_0^1\]
\[\Bbbsum_0^1\]
\end{document}
```

$\pi\Gamma$       $\pi\Gamma$

$\sum_0^1$

$\sum_0^1$

$\sum_0^1$

## 57 Test 013e

```
\input{umtest-preamble}  
\usepackage{unicode-math}  
\setmathfont{Cambria Math}  
\begin{document}  
\[\mathbb{it}{Ddei}\qquad\mathbb{it}{Ddei}\]  
\end{document}
```

*$\mathbb{Ddei}$     $\mathbb{Ddei}$*

## 58 Test 014a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

## 59 Test 014b

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

0123456789  
0123456789

**60 Test 014c**

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

## 61 Test 015a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\backslash\mathsf{fit}\backslash\mathrm{LATINtext}\backslash\]
\[\backslash\mathsf{fit}\backslash\mathrm{latinintext}\backslash\]
\[\backslash\mathsf{fit}\backslash\mathrm{LATINmath}\backslash\]
\[\backslash\mathsf{fit}\backslash\mathrm{latinmath}\backslash\]
\[\backslash\mathsf{fit}\backslash\mathrm{0123456789}\backslash\]
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
0123456789

## 62 Test 015b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\backslash\mathrm{LATINmathsf}\backslash]
\[\backslash\mathrm{latinmathsf}\backslash]
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

# 63 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

# 64 Test 016b

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

0123456789  
0123456789

# 65 Test 016c

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

## 66 Test 017a

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

## 67 Test 017b

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

## 68 Test 017c

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

## 69 Test 017d

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

## 70 Test 018a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz  
0123456789

## 71 Test 018b

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

ABΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω  
ABΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεζηθικλμνξοπρρςστυφφχψω

## 72 Test 019a

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

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
***abcdefghijklmnopqrstuvwxy***  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
***abcdefghijklmnopqrstuvwxy***  
0123456789

## 73 Test 019b

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

**ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
***αβγδεζηθικλμνξοπρρςστυφφχψω***  
**ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ**  
***αβγδεζηθικλμνξοπρρςστυφφχψω***

## 74 Test 020a

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

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
***abcdefghijklmnopqrstuvwxy***  
**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
***abcdefghijklmnopqrstuvwxy***  
0123456789

## 75 Test 020b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεεζηθδικκλμνξοπρρςστυφφχψω  
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  
αβγδεεζηθδικκλμνξοπρρςστυφφχψω

## 76 Test 021a

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
0123456789

## 77 Test 021b

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

*ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεεζηθδικκλμνξοπρρςστυφφχψω*  
*ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεεζηθδικκλμνξοπρρςστυφφχψω*

## 78 Test 030a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{FreeSerif}
\begin{document}
\[\mathbb{F}\]
\[\mathbb{F}\]
\[\mathup{\mathbb{F}}\]
\[\mathbf{\mathbb{F}}\]
\end{document}
```

 $\mathbb{F}$ 
 $\mathbb{F}$ 
 $\mathbb{F}$ 
 $\mathbb{F}$ 

## 79 Test 031a

```
\input{umtest-preamble}
\usepackage[nabla=upright]{unicode-math}
\setmathfont{Free Serif}
\begin{document}
\[\nabla \quad \nabla \quad \nabla\]
\[\nabla \quad \mathbf{\nabla} \quad \mathbf{sf{\nabla}}\]
\[\mathup{\nabla} \quad \mathit{\nabla}\]
\[\mathbfup{\nabla} \quad \mathbf{fit{\nabla}}\]
\[\mathbfsfup{\nabla} \quad \mathbf{sf{fit{\nabla}}}\]
\end{document}
```

 $\nabla \quad \nabla \quad \nabla$ 
 $\nabla \quad \nabla \quad \nabla$ 
 $\nabla \quad \nabla$ 
 $\nabla \quad \nabla$ 
 $\nabla \quad \nabla$ 

## 80 Test 031b

```
\input{umtest-preamble}
\usepackage[nabla=italic]{unicode-math}
\setmathfont{Free Serif}
\begin{document}
\[\nabla \quad \nabla \quad \nabla\]
\[\nabla \quad \mathbf{\nabla} \quad \mathbf{sf{\nabla}}\]
\[\mathup{\nabla} \quad \mathit{\nabla}\]
\[\mathbfup{\nabla} \quad \mathbf{fit{\nabla}}\]
\[\mathbfsfup{\nabla} \quad \mathbf{sf{fit{\nabla}}}\]
\end{document}
```

 $\nabla \quad \nabla \quad \nabla$ 
 $\nabla \quad \nabla \quad \nabla$ 
 $\nabla \quad \nabla$ 
 $\nabla \quad \nabla$ 
 $\nabla \quad \nabla$

## 81 Test 031c

```
\input{umtest-preamble}
\usepackage[nabla=literal]{unicode-math}
\setmathfont{Free Serif}
\begin{document}
\[\nabla \quad \nabla \quad \nabla\]
\[\nabla \quad \mathbf{\nabla} \quad \mathbf{sf{\nabla}}\]
\[\mathup{\nabla} \quad \mathit{\nabla}\]
\[\mathbfup{\nabla} \quad \mathbf{fit{\nabla}}\]
\[\mathbfsfup{\nabla} \quad \mathbf{fsfit{\nabla}}\]
\end{document}
```

$\nabla$   $\nabla$   $\nabla$   
 $\nabla$   $\nabla$   $\nabla$   
 $\nabla$   $\nabla$   
 $\nabla$   $\nabla$   
 $\nabla$   $\nabla$

## 82 Test 032a

```
\input{umtest-preamble}
\usepackage[partial=upright]{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\partial \quad \partial \quad \partial\]
\[\partial \quad \mathbf{\partial} \quad \mathbf{sf{\partial}}\]
\[\mathup{\partial} \quad \mathit{\partial}\]
\[\mathbfup{\partial} \quad \mathbf{fit{\partial}}\]
\[\mathbfsfup{\partial} \quad \mathbf{fsfit{\partial}}\]
\end{document}
```

$\partial$   $\partial$   $\partial$   
 $\partial$   $\partial$   $\partial$   
 $\partial$   $\partial$   
 $\partial$   $\partial$   
 $\partial$   $\partial$

## 83 Test 032b

```
\input{umtest-preamble}
\usepackage[partial=italic]{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\partial \quad \partial \quad \partial\]
\[\partial \quad \mathbf{\partial} \quad \mathbf{sf{\partial}}\]
\[\mathup{\partial} \quad \mathit{\partial}\]
\[\mathbfup{\partial} \quad \mathbf{fit{\partial}}\]
\[\mathbfsfup{\partial} \quad \mathbf{fsfit{\partial}}\]
\end{document}
```

$\partial$   $\partial$   $\partial$   
 $\partial$   $\partial$   $\partial$   
 $\partial$   $\partial$   
 $\partial$   $\partial$   
 $\partial$   $\partial$

## 84 Test 032c

```
\input{umtest-preamble}
\usepackage[partial=literal]{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\partial \quad \partial \quad \partial\]
\[\partial \quad \mathbf{\partial} \quad \mathbfsf{\partial}\]
\[\mathup{\partial} \quad \mathit{\partial}\]
\[\mathbfup{\partial} \quad \mathbfbit{\partial}\]
\[\mathbfsfup{\partial} \quad \mathbfbsfit{\partial}\]
\end{document}
```

$$\partial \quad \partial \quad \partial$$

$$\partial \quad \partial \quad \partial$$

$$\partial \quad \partial$$

$$\partial \quad \partial$$

$$\partial \quad \partial$$

## 85 Test 033a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\begin{document}
\setmathfont[math-style=TeX]{Free Serif}
\[\mathup{\mathit{\mathbf{\partial}}}\quad \mathup{\mathit{\mathbf{\partial}}}\]
\[\mathup{\mathit{\mathbf{\partial}}}\quad \mathup{\mathit{\mathbf{\partial}}}\]
\[\mathup{\mathit{\mathbf{\partial}}}\quad \mathup{\mathit{\mathbf{\partial}}}\]
\setmathfont[math-style=upright]{Free Serif}
\[\mathup{\mathit{\mathbf{\partial}}}\quad \mathup{\mathit{\mathbf{\partial}}}\]
\[\mathup{\mathit{\mathbf{\partial}}}\quad \mathup{\mathit{\mathbf{\partial}}}\]
\[\mathup{\mathit{\mathbf{\partial}}}\quad \mathup{\mathit{\mathbf{\partial}}}\]
\end{document}
```

$$\mathup{\mathit{\mathbf{\partial}}}$$

$$\mathup{\mathit{\mathbf{\partial}}}$$

$$\mathup{\mathit{\mathbf{\partial}}}$$

$$\mathup{\mathit{\mathbf{\partial}}}$$

$$\mathup{\mathit{\mathbf{\partial}}}$$

$$\mathup{\mathit{\mathbf{\partial}}}$$

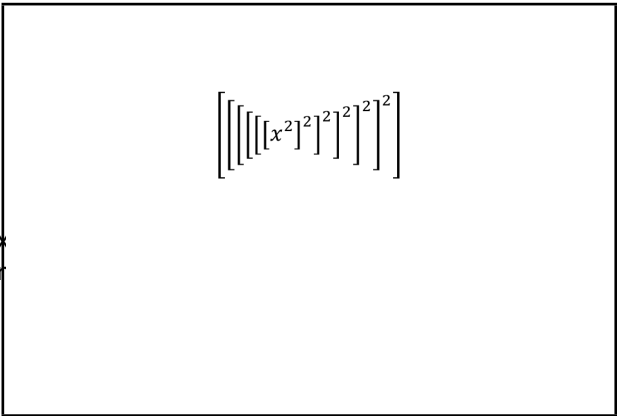
## 86 Test 100a

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

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

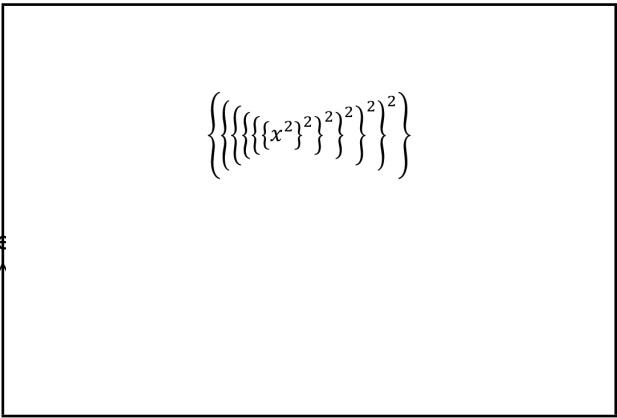
87 Test 100b

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



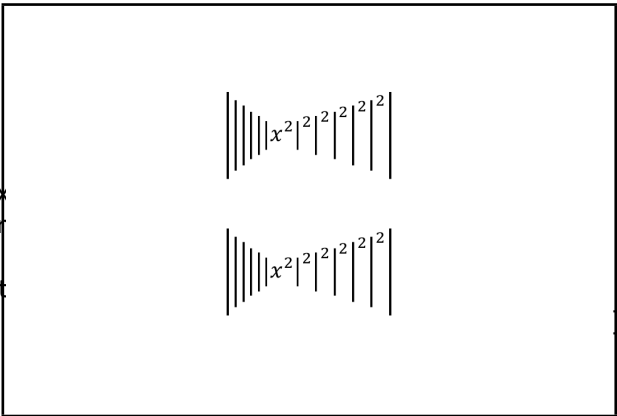
88 Test 100c

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



89 Test 100d

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



## 90 Test 100e

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

## 91 Test 101a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ a>b \quad c>d \ ]
\[ \left< \left< \left< \left< x \right>^2
      \right>^2 \right>^2 \right>^2 \ ]
\end{document}
```

$$a > b \quad c < d$$
$$\left\langle \left\langle \left\langle \langle x \rangle^2 \right\rangle^2 \right\rangle^2 \right\rangle^2$$

## 92 Test 102a

```
\input{umtest-preamble}
\usepackage[slash-delimiter=frac]{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \left.\left[\begin{array}{cc}
a & b \\ c & d
\end{array}\right]\right|
\middle/
\left[\begin{array}{c}
1 & 1 \\ 1 & 0
\end{array}\right]\right].
\]
\end{document}
```

$$\begin{bmatrix} a & b \\ c & d \end{bmatrix} / \begin{bmatrix} 1 & 1 \\ 1 & 0 \end{bmatrix}$$

## 93 Test 150a

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

$$\begin{array}{cc} \int & \int \cdots \int \\ \int & \int \cdots \int \end{array}$$

## 94 Test 151a

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

$\hat{i}$	$\hat{x}$	$\hat{M}$	$\widehat{x+y}$
$\hat{l}$	$\hat{x}$	$\hat{M}$	$\widehat{x+y}$
$\tilde{l}$	$\tilde{x}$	$\tilde{M}$	$\widetilde{x+y}$
$\tilde{i}$	$\tilde{x}$	$\tilde{M}$	$\widetilde{x+y}$

## 95 Test 200a

```
\input{umtest-preamble}
\usepackage{amsmath,unicode-math}
\setmathfont{Cambria Math}
\begin{document}
  [${x\prime\prime\prime}$]
  [${x\prime\prime\prime\prime\prime\prime}$]
  [${x'}$]
  [${x'''}$]
  [${x'''''''}$]
  [${x^2}$]
  [${x^{222}}$]
  [${x^{22}{}^2\prime^2}$]

  $x^{2222}$
  $x^{2222}$
  $x^{22}$
  $x^2$

\end{document}
```

$$\begin{array}{cccccccc} [x'''] & [x'''''] & [x'] & [x'''] & [x'''''] & [x'] & [x'''] & [x'''''] \\ x'''''''' & x'''''''' & x''' & x''' & & & & \end{array}$$

96 Test 200b

```
\input{umtest-preamble}
\usepackage{amsmath,unicode-math}
\setmathfont{Asana Math}
\begin{document}
  [${x\backprime\backprime\backprime}$]
  [${x\backprime\backprime\backprime\backprime}$]
  [${x^`}$]
  [${x^{``}$}]
  [${x^{````}$}]
  [${x^{\text{`}}}$]
  [${x^{\text{``}}}$]
  [${x^{\text{```}}\backprime}$]

  $x^{\text{```}}$
  $x^{\text{```}}^`$
  $x^{\text{``}}$
  $x^{\text{`}}$
\end{document}
```

$$\begin{array}{cccccccc} [x^{\text{`}}] & [x^{\text{``}}] & [x^{\text{```}}] & [x^{\text{````}}] & [x^{\text{`````}}] & [x^{\text{``````}}] & [x^{\text{```````}}] & [x^{\text{````````}}] \\ x^{\text{````````}} & x^{\text{````````}} & x^{\text{```}} & x^{\text{``}} \end{array}$$

97 Test 201a

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

$$\begin{array}{c} \sqrt{\sin^2 x + \cos^2 x} = 1 \\ \sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + x}}}} \end{array}$$

98 Test 202a

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

$$a\colon b \qquad a : b \qquad a : b$$

99 Test 202b

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

$$a:b \qquad a:b \qquad a:b$$

100 Test 203a

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

$$a-b$$
$$a-b$$

101 Test 204a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\setlength\parskip{12pt}
\begin{document}
 $x_{012} x_{123} x_{234} x_{345} x_{456} x_{567} x_{678} x_{789} x_{89+}$ 
 $x_{9+-} x_{+-(} x_{-(=}$   $x_{(=)}$   $x_{=)a}$   $x_{)ae}$   $x_{aeo}$   $x_{eox}$   $x_{ox0}$   $x_{x01}$ 
 $x^{0i+)n2}$   $x^{i+)n2}$   $x^{n2}$   $x^{2i+)n}$ 
 $x_{34}^{2i+)n}$ 
 $x_{34}^{2i+)n}$ 
 $x_{34}^{2i+)n}$ 
 $x_{34}^{2i+)n}$ 
\end{document}
```

$$x_{012} x_{123} x_{234} x_{345} x_{456} x_{567} x_{678} x_{789} x_{89+}$$
$$x_{9+-} x_{+-(} x_{-(=}$$
  $x_{(=)}$   $x_{=)a}$   $x_{)ae}$   $x_{aeo}$   $x_{eox}$   $x_{ox0}$   $x_{x01}$ 
$$x^{0i+)n2} x^{i+)n2} x^{n2} x^{2i+)n}$$
$$x_{34}^{2i+)n}$$

## 102 Test 205a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\iiint_V\]
\removenolimits\iiint
\[\iiint_V\]
\addnolimits\iiint
\[\iiint_V\]
\end{document}
```

$$\iiint_V$$
$$\iiint_V$$
$$\iiint_V$$

## 103 Test 206a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[(A+B+\dots+Z)\]
\[(A+B+\dots)\]
\[(A+B+\cdots)\]
\end{document}
```

$$A + B + \dots + Z$$
$$(A + B + \dots)$$
$$(A + B + \cdots)$$

## 104 Test 206b

```
\input{umtest-preamble}
\usepackage{amsmath}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[(A+B+\dots+Z)\]
\[(A+B+\dots)\]
\[(A+B+\cdots)\]
\end{document}
```

$$A + B + \cdots + Z$$
$$(A + B + \dots)$$
$$(A + B + \cdots)$$

105 Test 206c

```
\input{umtest-preamble}
\usepackage{amsmath}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\ a\percent b \ \% \ c \ \]
\[\ a\mathdollar b \ \$ \ c \ \]
\[\ a\ampersand b \ \& \ c \ \]
\[\ a\octothorpe b \ \# \ c \ \]
\end{document}
```

$a\%b\%c$

$a$b$c$

$a\&b\&c$

$a\#b\#c$

106 Test 207a

```
\input{umtest-preamble}
\usepackage{amsmath}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\unimathsetup{active-frac=normalsize}
\[\ \tfrac{1}{2}\tfrac{3}{4}\tfrac{1}{9}\tfrac{1}{10}\tfrac{1}{3}\tfrac{2}{5}\tfrac{1}{3}\tfrac{2}{5}\tfrac{3}{5}\tfrac{4}{5}\tfrac{1}{6}\tfrac{5}{8}\tfrac{1}{8}\tfrac{3}{8}\tfrac{7}{8} \ \]
\unimathsetup{active-frac=small}
\[\ \tfrac{1}{2}\tfrac{3}{4}\tfrac{1}{9}\tfrac{1}{10}\tfrac{1}{3}\tfrac{2}{5}\tfrac{1}{3}\tfrac{2}{5}\tfrac{3}{5}\tfrac{4}{5}\tfrac{1}{6}\tfrac{5}{8}\tfrac{1}{8}\tfrac{3}{8}\tfrac{7}{8} \ \]
\end{document}
```

$$\frac{1}{4}\frac{1}{2}\frac{3}{4}\frac{1}{9}\frac{1}{10}\frac{1}{3}\frac{2}{5}\frac{1}{3}\frac{2}{5}\frac{3}{5}\frac{4}{5}\frac{1}{6}\frac{5}{8}\frac{1}{8}\frac{3}{8}\frac{7}{8}$$

$$\frac{1}{4}\frac{1}{2}\frac{3}{4}\frac{1}{9}\frac{1}{10}\frac{1}{3}\frac{2}{5}\frac{1}{3}\frac{2}{5}\frac{3}{5}\frac{4}{5}\frac{1}{6}\frac{5}{8}\frac{1}{8}\frac{3}{8}\frac{7}{8}$$

107 Test 300a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[script-font = {Asana Mat
script-features = {ScriptSty
sscript-font = {Cambria M
sscript-features= {ScriptScr
{Cambria Math}
\begin{document}
\[\ 123456789^{123456789^{123456789}} \ \]
\end{document}
```

123456789<sup>123456789<sup>123456789</sup></sup>

## 108 Test 400a

```
\input{umtest-preamble}
\usepackage[trace=on]{unicode-math}
\setmainfont{TeX Gyre Pagella}
\setsansfont{TeX Gyre Adventor}
\setmonofont{TeX Gyre Cursor}
\setmathfont{Cambria Math}
\usepackage{url}
\begin{document}
\centering\obeylines
\url{http://www.lmgtfy.com/}
\url{?q="~!@#$$%^&*()<>`'}
\urlstyle{rm}
\url{http://www.lmgtfy.com/}
\url{?q="~!@#$$%^&*()<>`'}
\urlstyle{sf}
\url{http://www.lmgtfy.com/}
\url{?q="~!@#$$%^&*()<>`'}
\end{document}
```

```
http://www.lmgtfy.com/
?q="~!@#$$%^&*()<>`'
http://www.lmgtfy.com/
?q="~!@#$$%^&*()<>`'
http://www.lmgtfy.com/
?q="~!@#$$%^&*()<>`'
```

## 109 Test 401a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\begin{document}

\[ x=1.23 \quad x=1,23\]

\setmathfont{Cambria Math}

\[ x=1.23 \quad x=1,23\]

\end{document}
```

$$x = 1.23 \quad x = 1,23$$

$$x = 1.23 \quad x = 1,23$$

## 110 Test 500a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[Colour=000000]{Cambria Math}
\setmathfont[range={\mathop}, Colour=FF0000]{Cambria Math}
\setmathfont[range={"3D"}, Colour=009900]{Cambria Math}
\setmathfont[range={\mathopen,\mathclose},
    Colour=0000FF]{Cambria Math}
\setlength\parskip{12pt}
\begin{document}
\[
F(s)=\mathscr{L}\left\{f(t)\right\}=
\int_0^\infty \mathop{e}^{\{-st\}}f(t)\,,\mathop{\mathrm{d}}t
\]
\end{document}
```

$$F(s) = \mathcal{L}\{f(t)\} = \int_0^\infty e^{-st} f(t) \, dt$$

## 111 Test 501a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[Colour=000000]{Cambria Math}
\setmathfont[range=\mathscr, Colour=FF0000]{Cambria Math}
\setmathfont[range=\mathfrak, Colour=0000FF]{Cambria Math}
\begin{document}
\[\backslash\text{latintext}\]
\[\backslash\mathscr{\text{latintext}}\]
\[\backslash\mathfrak{\text{latintext}}\]
\[\backslash\text{LATINmath}\]
\[\backslash\mathscr{\text{LATINmath}}\]
\[\backslash\mathfrak{\text{LATINmath}}\]
\end{document}
```

*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*

## 112 Test 501b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[Colour=000000]{Cambria Math}
\setmathfont[range=\mathscr, Colour=FF0000]{Cambria Math}
\begin{document}
\[\backslash\text{latintext}\]
\[\backslash\mathscr{\text{latintext}}\]
\[\backslash\text{LATINmath}\]
\[\backslash\mathscr{\text{LATINmath}}\]
\end{document}
```

*abcdefghijklmnopqrstuvwxyz*  
*abcdefghijklmnopqrstuvwxyz*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*ABCDEFGHIJKLMNOPQRSTUVWXYZ*

## 113 Test 501d

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[Colour=330000]{Cambria Math}
\setmathfont[range=\mathit/{latin}, Colour=660000]{Cambria Math}
\setmathfont[range=\mathit/{greek}, Colour=990000]{Cambria Math}
\setmathfont[range=\mathit/{greek}, Colour=BB0000]{Cambria Math}
\setmathfont[range=\mathup/{num}, Colour=EE0000]{Cambria Math}
\begin{document}
\[\backslash\mathit{\text{LATINtext}}\]
\[\backslash\mathit{\text{latintext}}\]
\[\backslash\mathit{\text{GREEKtext}}\]
\[\backslash\mathit{\text{greektext}}\]
\[\backslash\text{0123456789}\]
\end{document}
```

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*  
*ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ*  
*αβγδεζηθικλμνξοπρρςστυφφχψω*  
*0123456789*

## 114 Test 501e

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[
  range={
    \mathit/{latin}->\mathbfup ,
    \mathit/{Latin}->\mathsfup
  }
]{Cambria Math}
\setmathfont[
  range={
    \mathup/{GreeK}->\mathbfup ,
    \mathit/{greek}->\mathbfit
  },
  Colour=990000
]{Cambria Math}
\begin{document}
\vspace*{-1cm}
\[\backslash\text{LATINtext}\backslash]
\[\backslash\text{latin}\text{t}\backslash]
\[\backslash\mathit{\text{LATIN}\text{t}\backslash}
\[\backslash\mathit{\text{latin}\text{t}\backslash}
\[\backslash\{\text{GREEK}\text{t}\backslash}
\[\backslash\{\text{greek}\text{t}\backslash}
\[\backslash\mathup{\text{GREEK}\text{t}\backslash}
\[\backslash\mathit{\text{greek}\text{t}\backslash}
\end{document}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ
<b>abcdefghijklmnopqrstuvwxyz</b>
ABCDEFGHIJKLMNOPQRSTUVWXYZ
<b>abcdefghijklmnopqrstuvwxyz</b>
<b>ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ</b>
<b>αβγδεεζηθθικκλμνξοπωρρςστυφφχψω</b>
<b>ΑΒΓΔΕΖΗΘΘΙΚΑΜΝΞΟΠΡΣΤΥΦΧΨΩ</b>
<b>αβγδεεζηθθικκλμνξοπωρρςστυφφχψω</b>

## 115 Test 502a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{STIXGeneral}
\setmathfont
  [range={\mathit,\mathsfit,\mathscr}]
  {STIXGeneral-Italic}
\setmathfont
  [range={\mathbfup,\mathbffrak,
    \mathbfsfup}]
  {STIXGeneral-Bold}
\setmathfont
  [range={\mathbfit,\mathbfsfit,\mathbfscr}]
  {STIXGeneral-BoldItalic}
\begin{document}
\[\backslash\mathit{A}\backslash\mathup{A}
  \backslash\mathsfup{A}\backslash\mathsfit{A}\backslash]
\[\backslash\mathscr{A}\backslash\mathfrak{A}\backslash\mathbb{A}\backslash]
\[\backslash\mathbfup{A}\backslash\mathbfit{A}
  \backslash\mathbfsfup{A}\backslash\mathbfsfit{A}\backslash]
\[\backslash\mathbfscr{A}\backslash\mathbffrak{A}\backslash]
\end{document}
```

AAAA
<i>A A A A</i>
<b>A A A A</b>
<b><i>A A A A</i></b>

## 116 Test 502b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\begin{document}
Default:
\[
(a+b)^2 = \sqrt{c+d}
\]
\setmathfont[range={\mathup}]{Linux Libertine}
\setmathfont[range={\mathit}]{Linux Libertine}
Example of a non-math OpenType font:
\[
(a+b)^2 = \sqrt{c+d}
\]
With symbols:
\setmathfont[range={`\+,`\=,`\(,`\)}]{Linux Libertine}
\[
(a+b)^2 = \sqrt{c+d}
\]
\end{document}
```

Default:

$$(a + b)^2 = \sqrt{c + d}$$

Example of a non-math OpenType font:

$$(a + b)^2 = \sqrt{c + d}$$

With symbols:

$$(a + b)^2 = \sqrt{c + d}$$