The unicode-math test suite

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1 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.

2 XeLaTeX test files

2.1 Test X001a

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

$$ABCDEFGHIJKLMNOPQRSTUVWXYZ$$

$$abcdefghijklmnopqrstuvwxyz$$

$$ABCDEFGHIJKLMNOPQRSTUVWXYZ$$

$$abcdefghijklmnopqrstuvwxyz$$

2.2 Test X001b

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

$$ABCDEFGHIJKLMNOPQRSTUVWXYZ$$

$$abcdefghijklmnopqrstuvwxyz$$

$$ABCDEFGHIJKLMNOPQRSTUVWXYZ$$

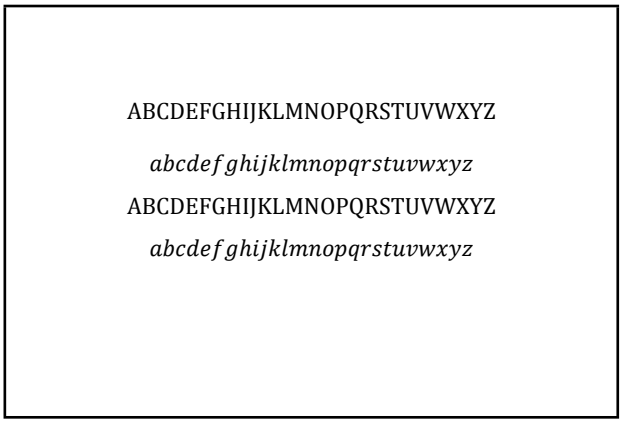
$$abcdefghijklmnopqrstuvwxyz$$

2.3 Test X001c

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

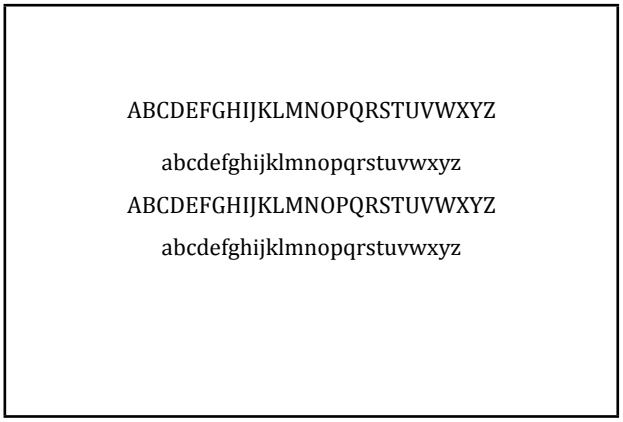
2.4 Test X001d

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



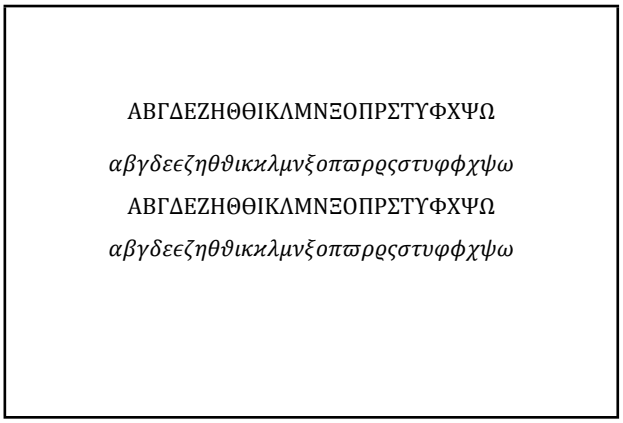
2.5 Test X001e

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



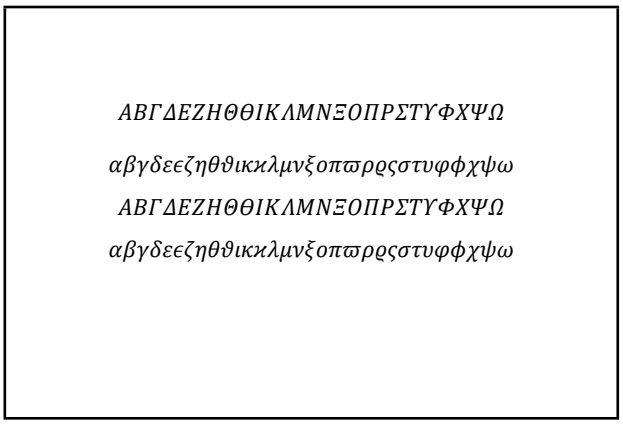
2.6 Test X002a

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



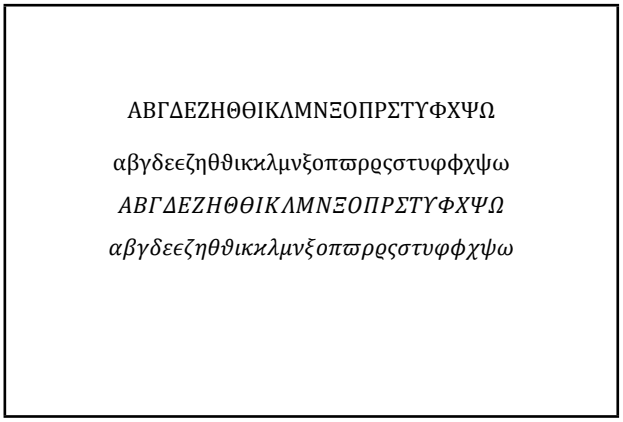
2.7 Test X002b

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



2.8 Test X002c

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



2.9 Test X002d

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεεζηθϑικϰλμνξοπϖρϱσςτυφφχψω

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεεζηθϑικϰλμνξοπϖρϱσςτυφφχψω

2.10 Test X002e

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεεζηθϑικϰλμνξοπϖρϱσςτυφφχψω

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεεζηθϑικϰλμνξοπϖρϱσςτυφφχψω

2.11 Test X003a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

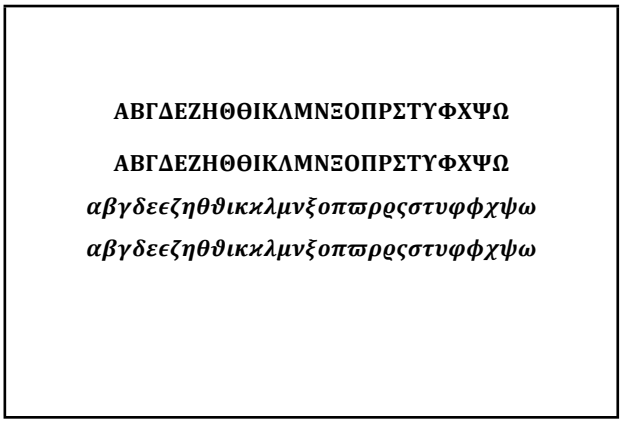
abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

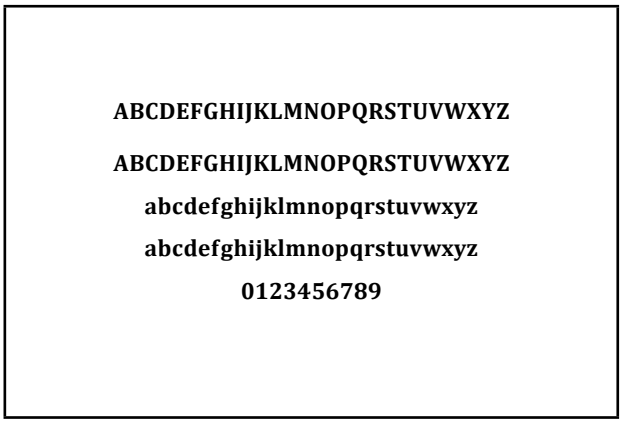
2.12 Test X003b

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



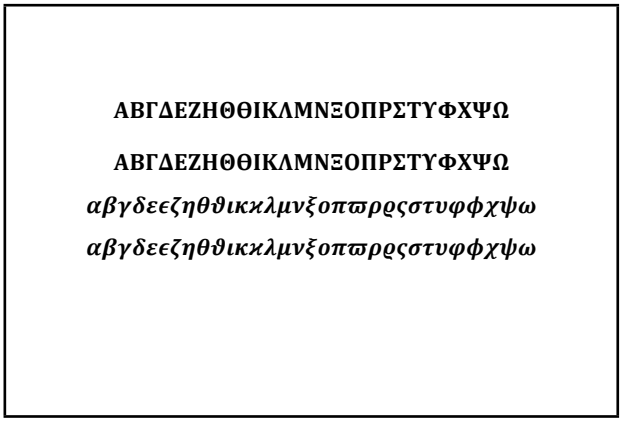
2.13 Test X003c

```
\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}
```



2.14 Test X003d

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



2.15 Test X003e

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

$$\mathbf{ABCDEFGHIJKLMNOPQRSTUVWXYZ}$$

$$\mathbf{\mathit{ABCDEFGHIJKLMNOPQRSTUVWXYZ}}$$

$$\mathbf{abcdefghijklmnopqrstuvwxyz}$$

$$\mathbf{\mathit{abcdefghijklmnopqrstuvwxyz}}$$

$$\mathbf{0123456789}$$

2.16 Test X003f

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

$$\mathbf{\Alpha\Beta\Gamma\Delta\Epsilon\Zeta\Eta\Theta\Iota\Kappa\Lambda\Mu\Nu\Xi\Omicron\Pi\Rho\Sigma\Tau\Upsilon\Phi\Chi\Psi\Omega}$$

$$\mathbf{\mathit{\Alpha\Beta\Gamma\Delta\Epsilon\Zeta\Eta\Theta\Iota\Kappa\Lambda\Mu\Nu\Xi\Omicron\Pi\Rho\Sigma\Tau\Upsilon\Phi\Chi\Psi\Omega}}$$

$$\mathbf{\alpha\beta\gamma\delta\varepsilon\zeta\eta\vartheta\iota\varkappa\lambda\mu\nu\xi\omicron\pi\varrho\varsigma\sigma\tau\upsilon\varphi\chi\psi\omega}$$

$$\mathbf{\mathit{\alpha\beta\gamma\delta\varepsilon\zeta\eta\vartheta\iota\varkappa\lambda\mu\nu\xi\omicron\pi\varrho\varsigma\sigma\tau\upsilon\varphi\chi\psi\omega}}$$

2.17 Test X003g

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

$$\mathbf{ABCDEFGHIJKLMNOPQRSTUVWXYZ}$$

$$\mathbf{\mathit{ABCDEFGHIJKLMNOPQRSTUVWXYZ}}$$

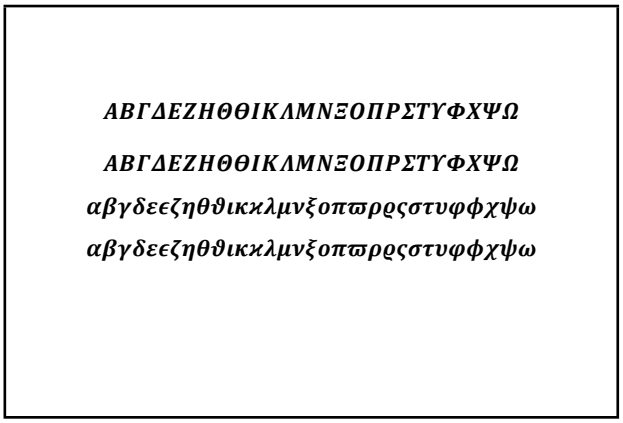
$$\mathbf{abcdefghijklmnopqrstuvwxyz}$$

$$\mathbf{\mathit{abcdefghijklmnopqrstuvwxyz}}$$

$$\mathbf{0123456789}$$

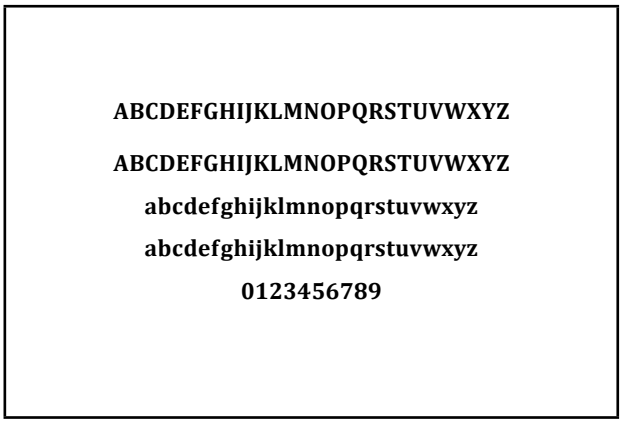
2.18 Test X003h

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



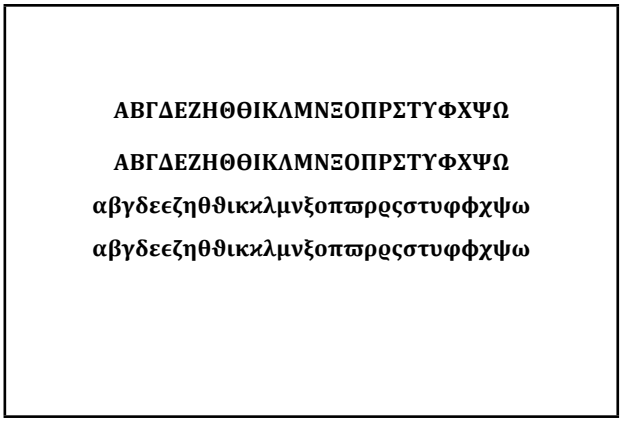
2.19 Test X003i

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



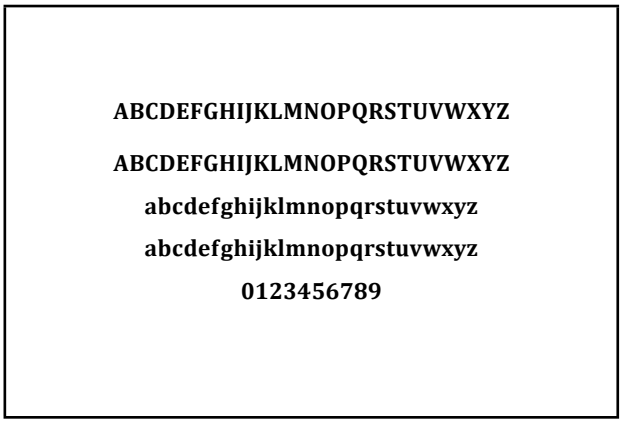
2.20 Test X003j

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



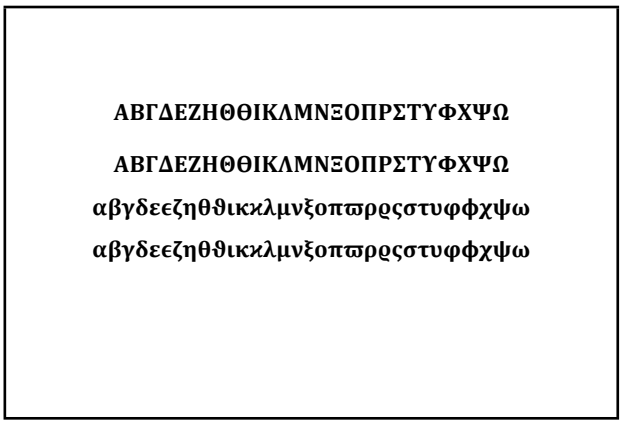
2.21 Test X003k

```
\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}
```



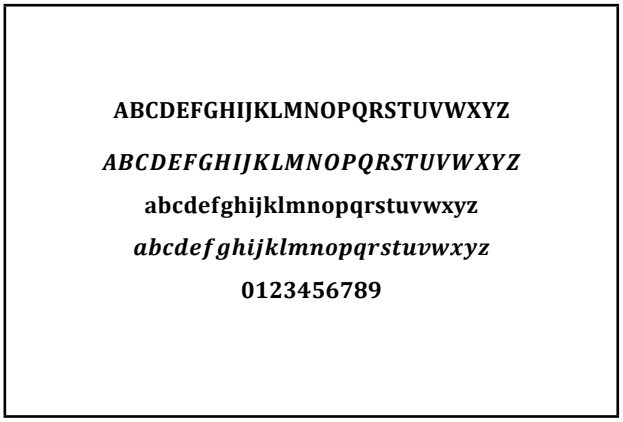
2.22 Test X003l

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



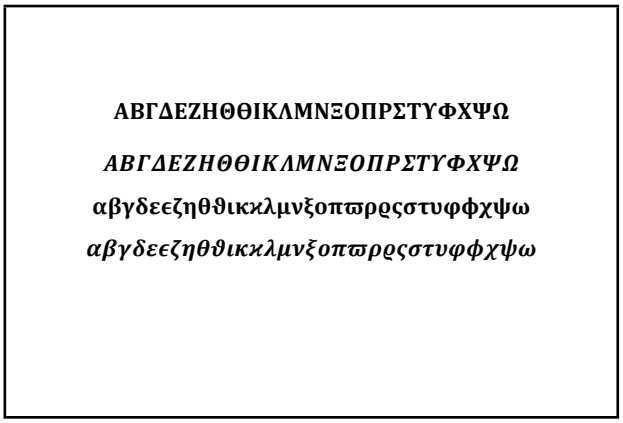
2.23 Test X003m

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



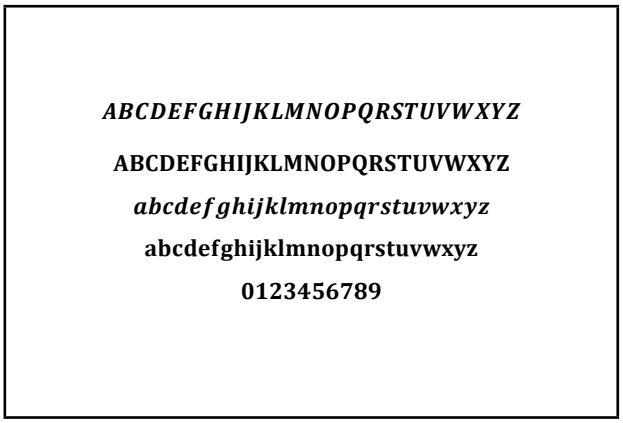
2.24 Test X003n

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



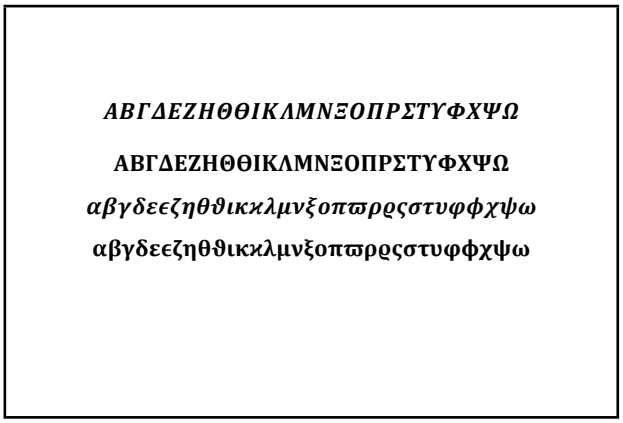
2.25 Test X003o

```
\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}
```



2.26 Test X003p

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



2.27 Test X004a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

2.28 Test X004b

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

2.29 Test X004c

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

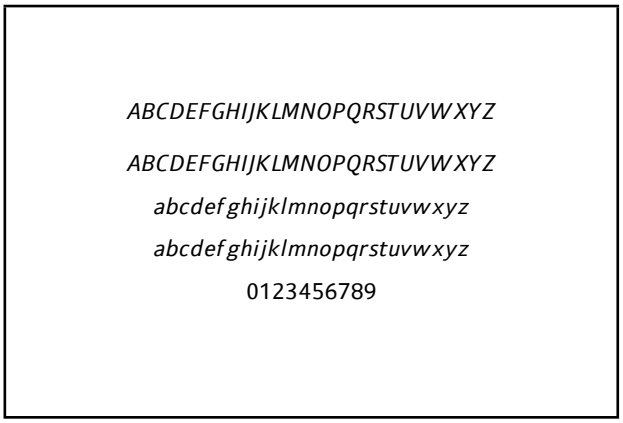
abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

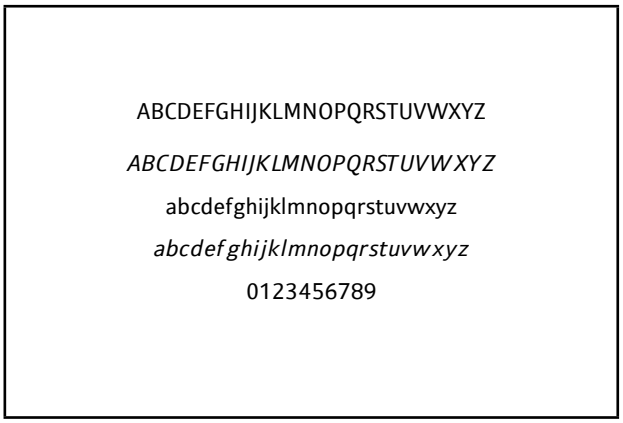
2.30 Test X004d

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



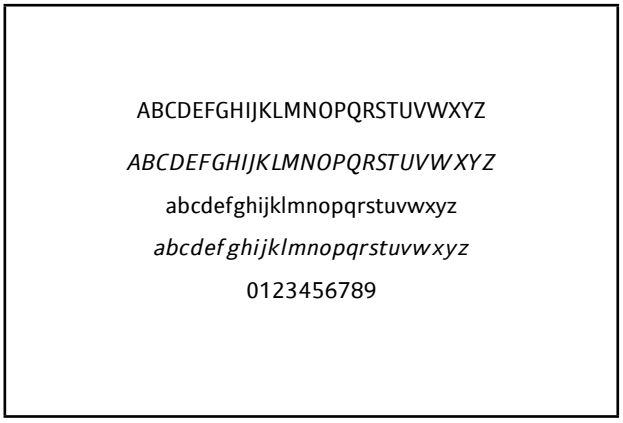
2.31 Test X004e

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



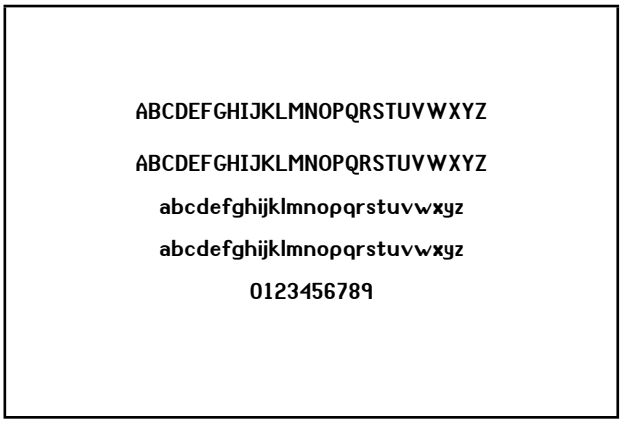
2.32 Test X004f

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



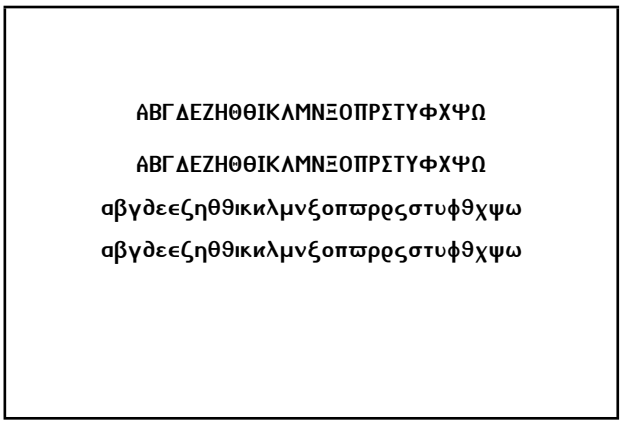
2.33 Test X005a

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



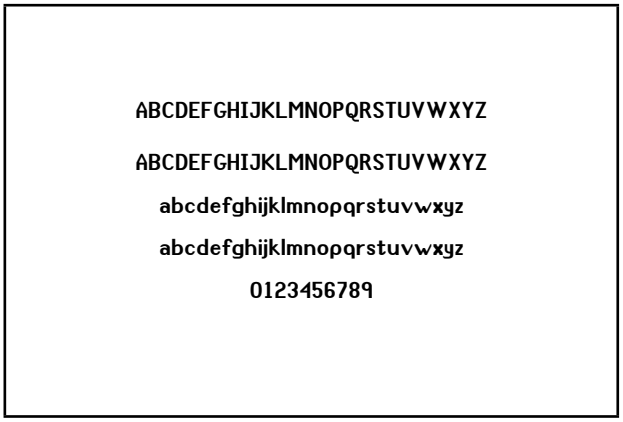
2.34 Test X005b

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



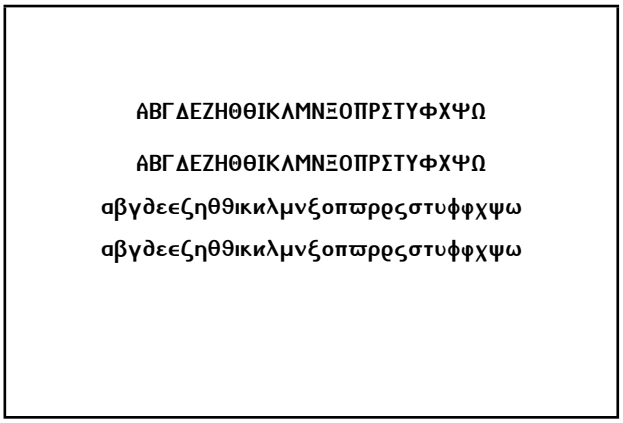
2.35 Test X005c

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



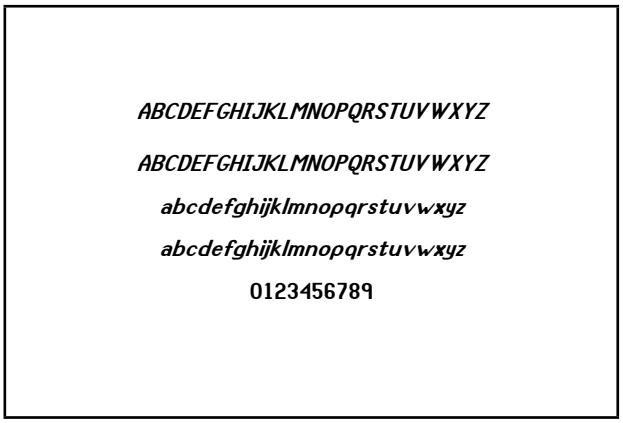
2.36 Test X005d

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



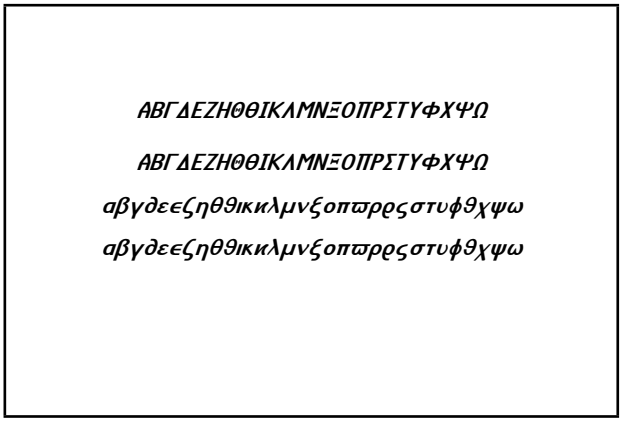
2.37 Test X005e

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



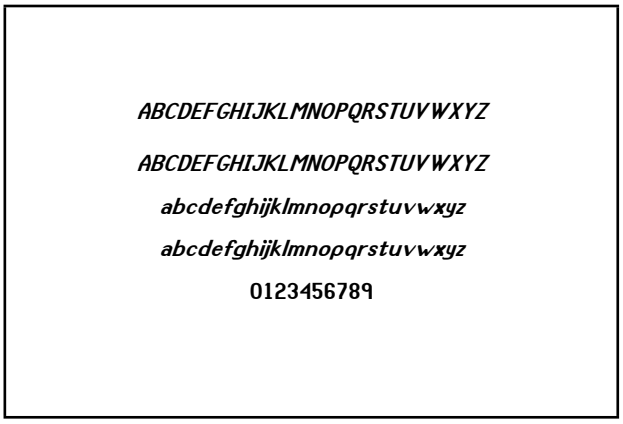
2.38 Test X005f

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



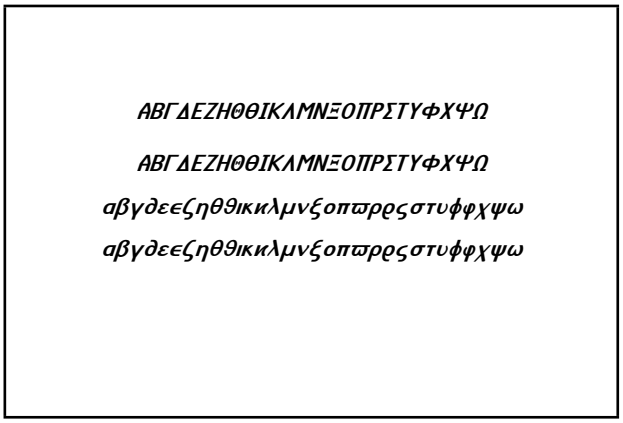
2.39 Test X005g

```
\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}
```



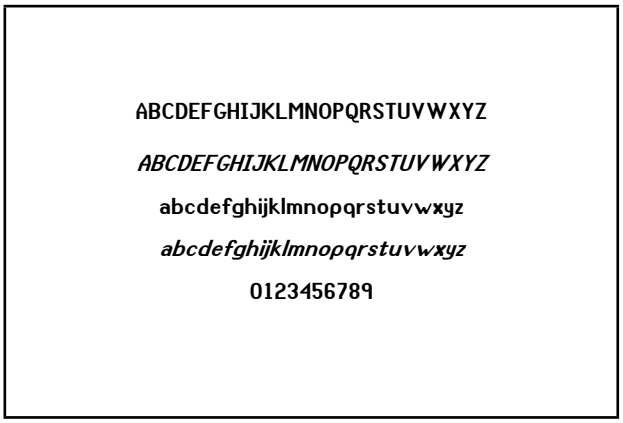
2.40 Test X005h

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



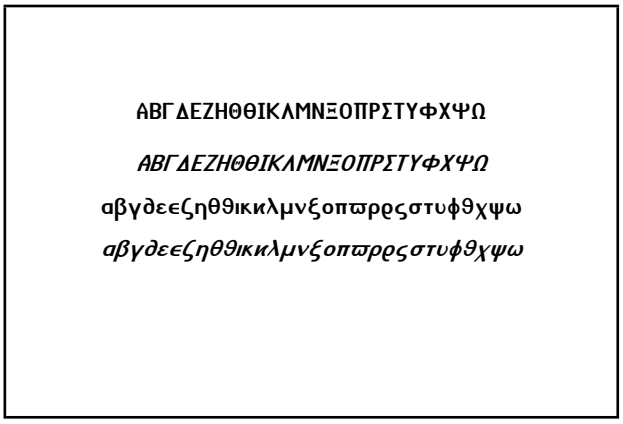
2.41 Test X005i

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



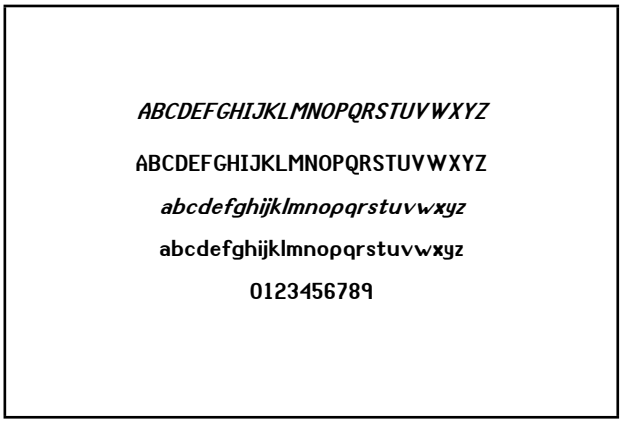
2.42 Test X005j

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



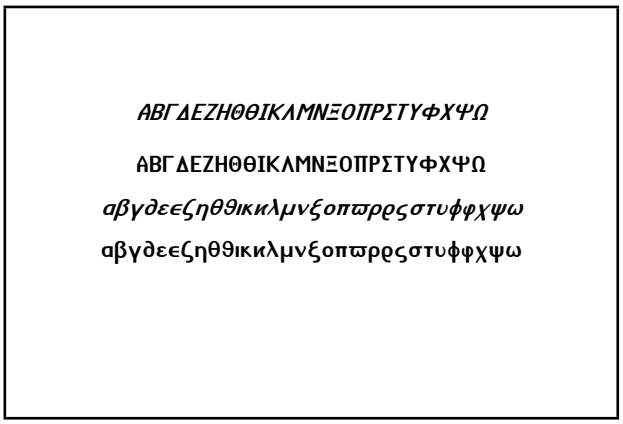
2.43 Test X005k

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



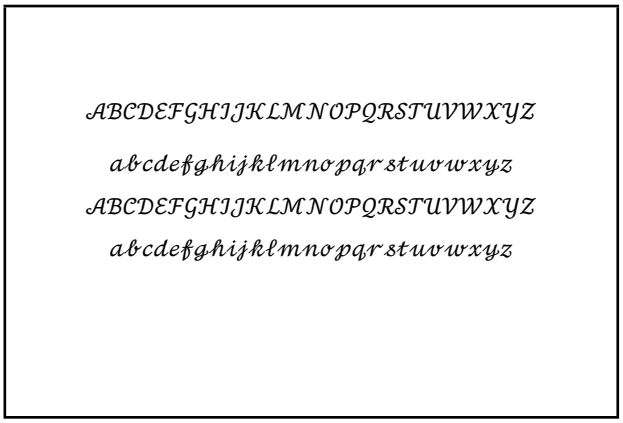
2.44 Test X005l

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



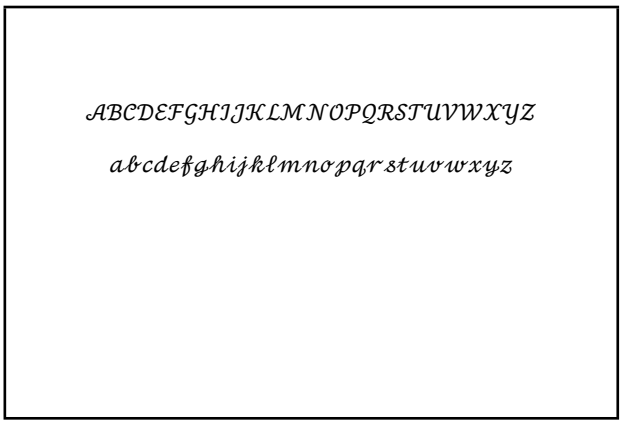
2.45 Test X010a

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



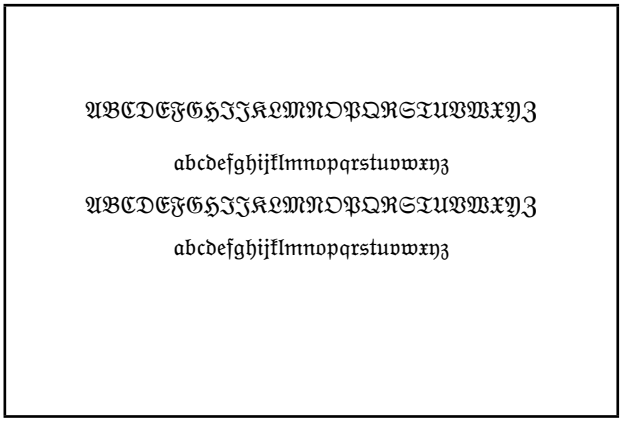
2.46 Test X010b

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



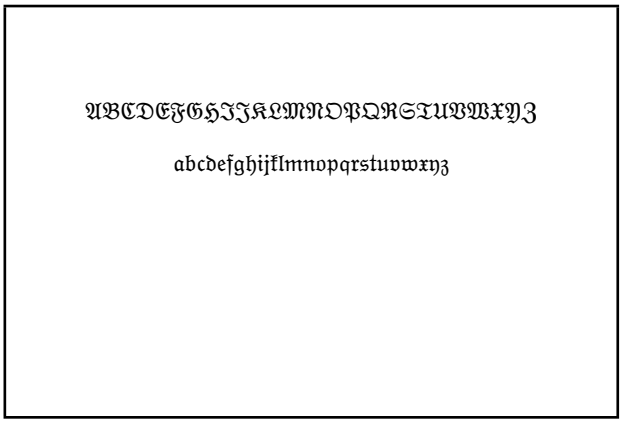
2.47 Test X010c

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



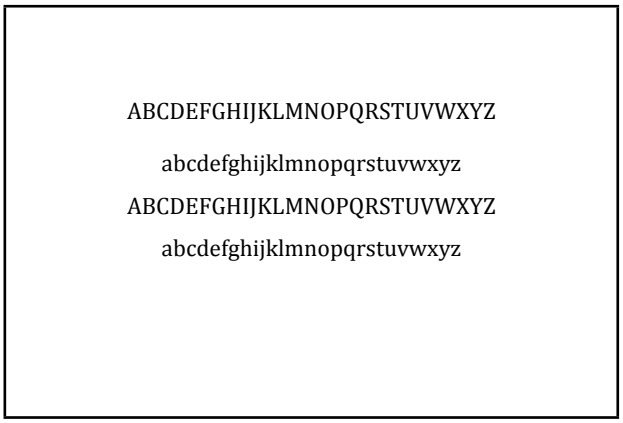
2.48 Test X010d

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



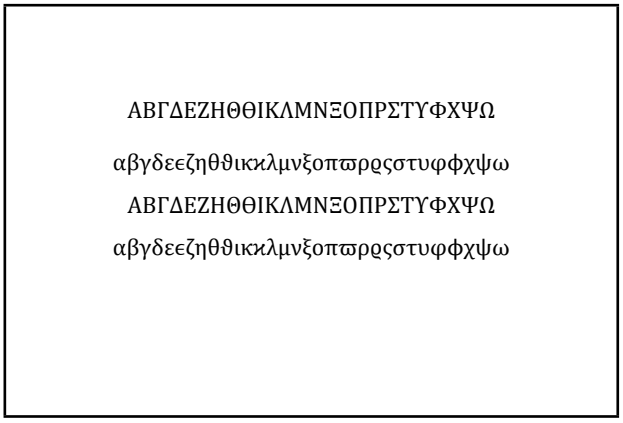
2.49 Test X011a

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



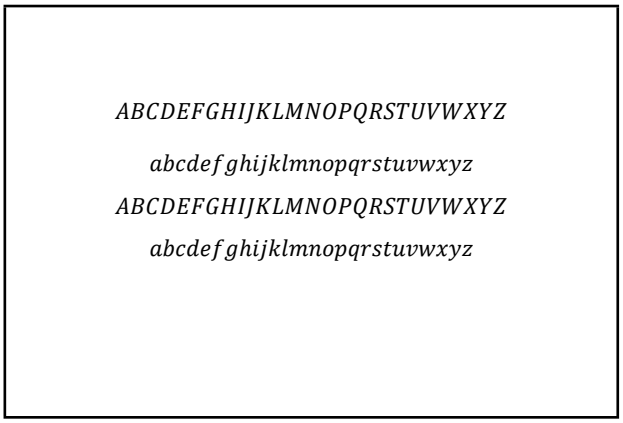
2.50 Test X011b

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



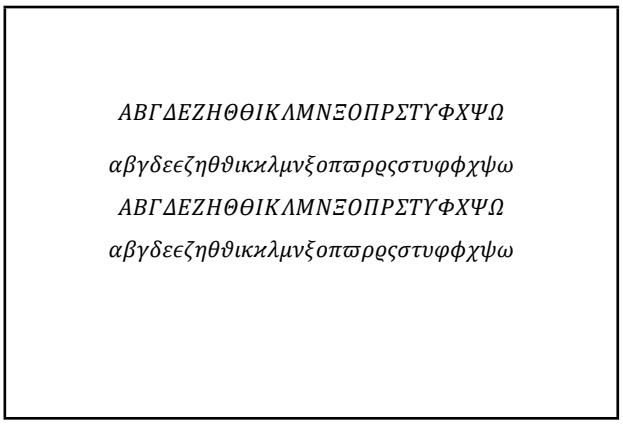
2.51 Test X012a

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



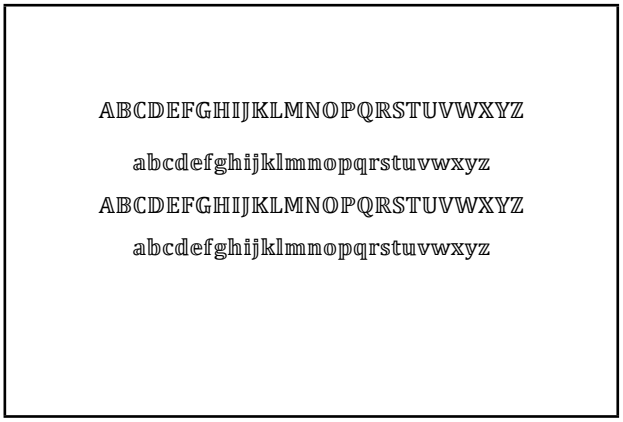
2.52 Test X012b

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



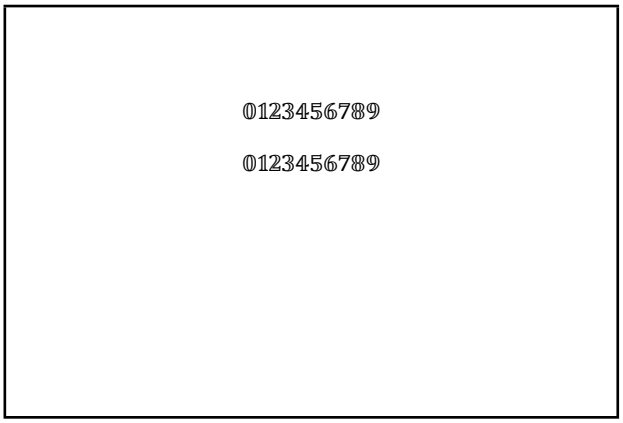
2.53 Test X013a

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



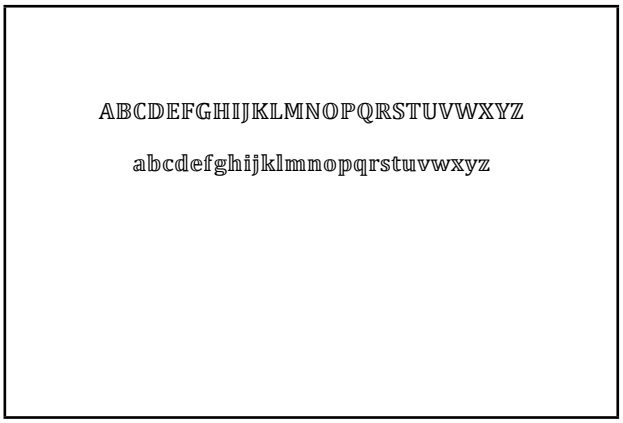
2.54 Test X013b

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



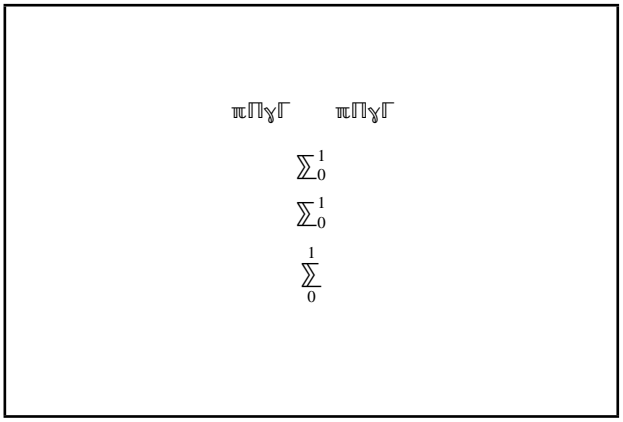
2.55 Test X013c

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



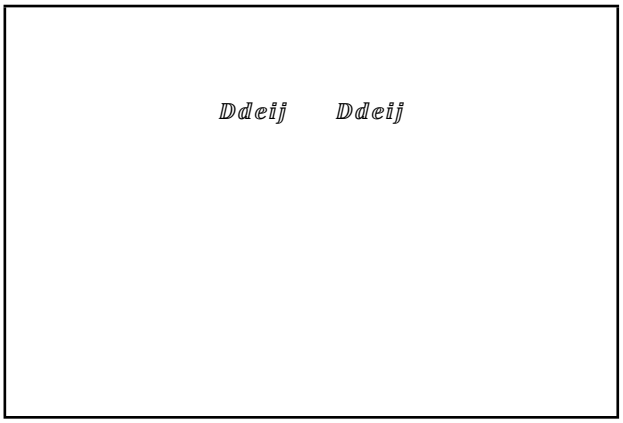
2.56 Test X013d

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{STIXGeneral}
\begin{document}
\[ \mathbb{πΠγΓ} \qquad \mathbb{□□□□} \]
\[ \mathbb{\sum}_0^1 \]
\[ \mathbb{∑}_0^1 \]
\[ \Bbbsum_0^1 \]
\end{document}
```



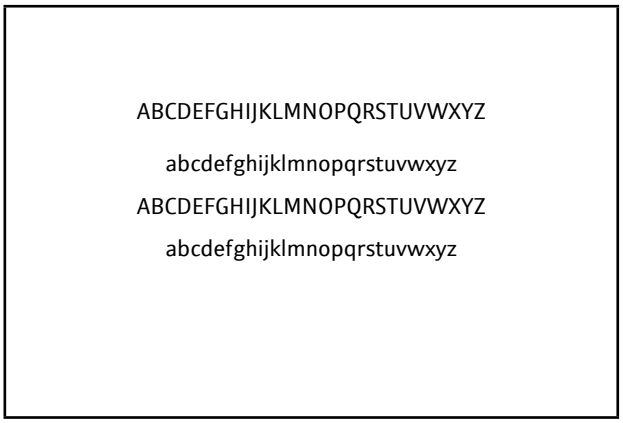
2.57 Test X013e

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbbit{Ddeij}\qquad\mathbbit{□□□□□}\]
\end{document}
```



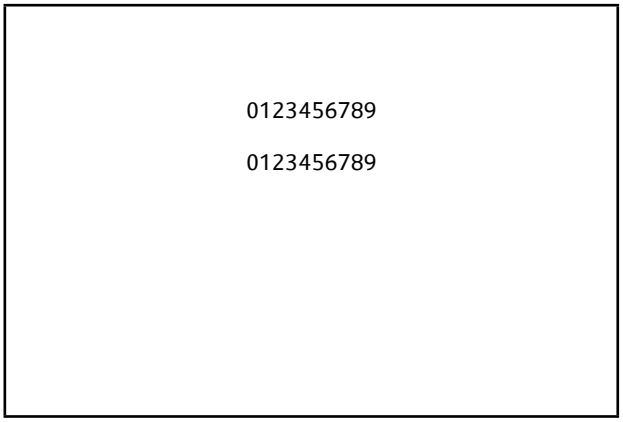
2.58 Test X014a

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



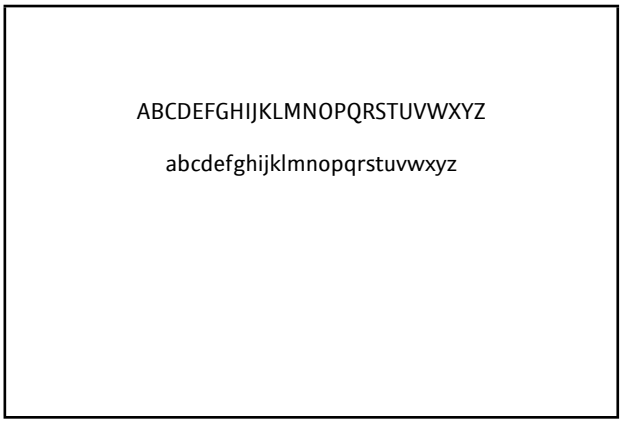
2.59 Test X014b

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



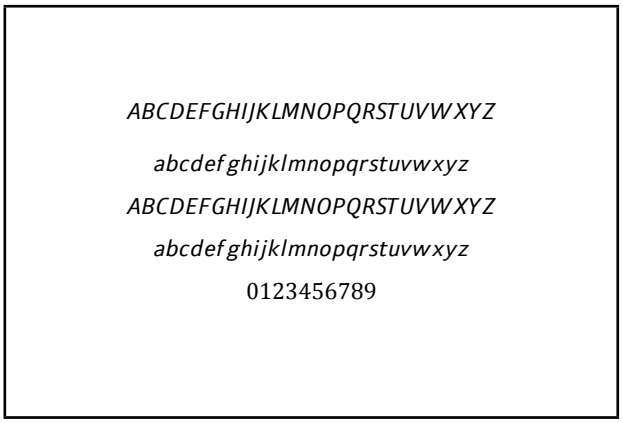
2.60 Test X014c

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



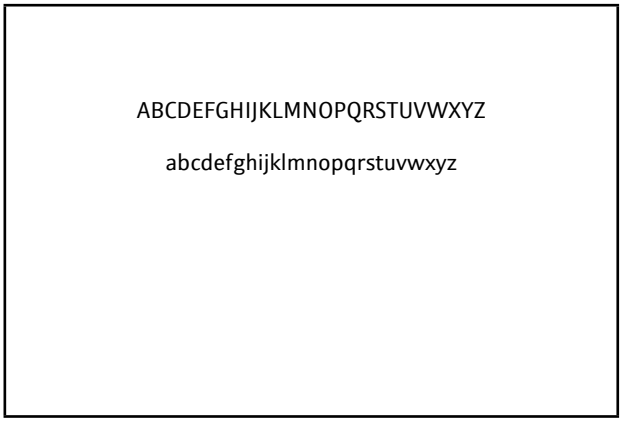
2.61 Test X015a

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



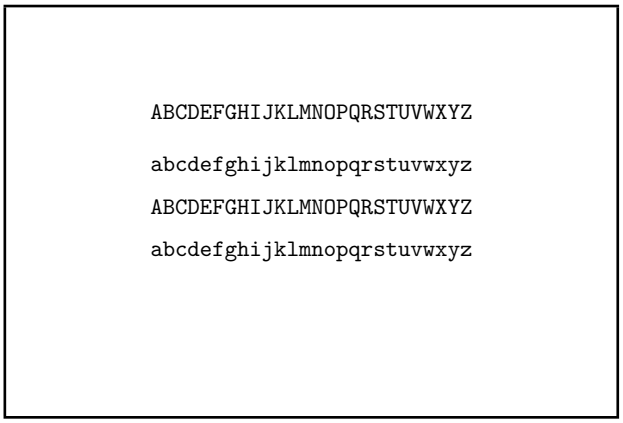
2.62 Test X015b

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



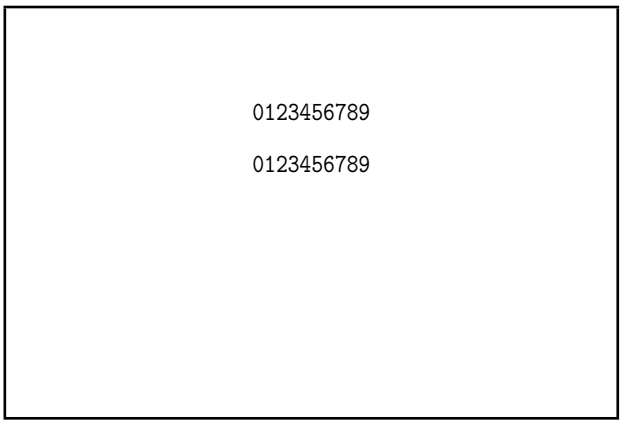
2.63 Test X016a

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



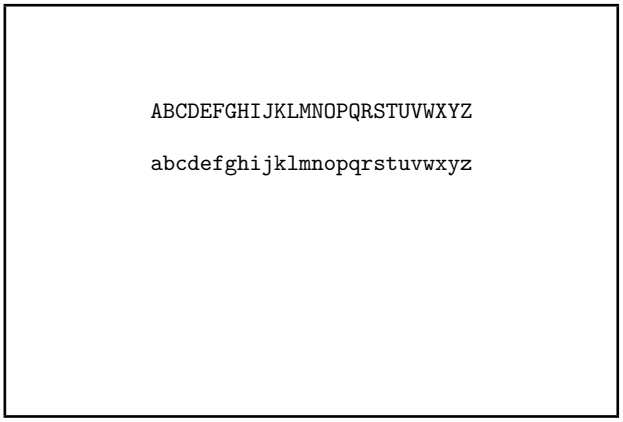
2.64 Test X016b

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



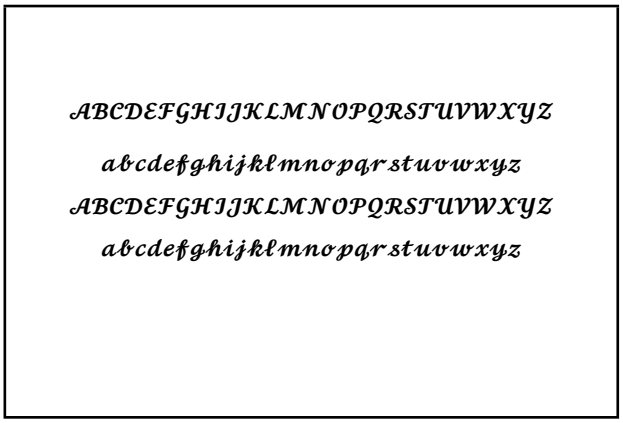
2.65 Test X016c

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



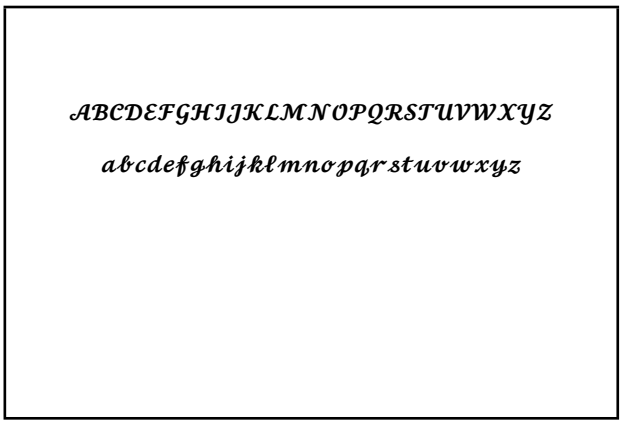
2.66 Test X017a

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



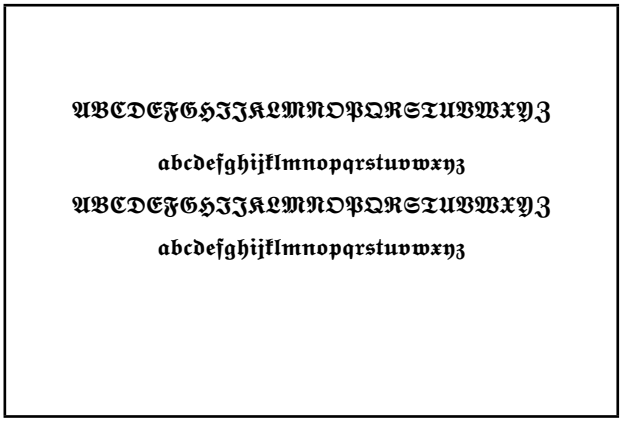
2.67 Test X017b

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



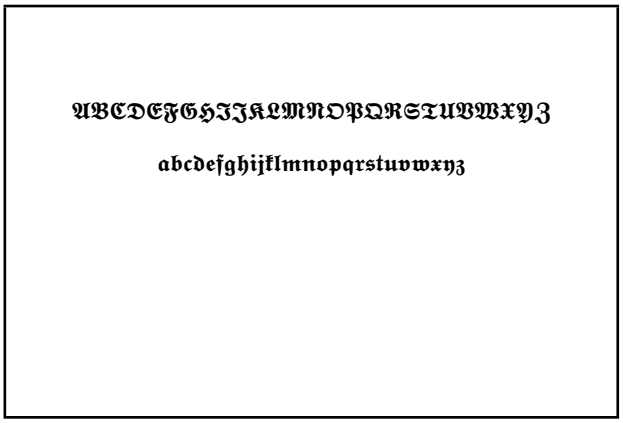
2.68 Test X017c

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



2.69 Test X017d

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

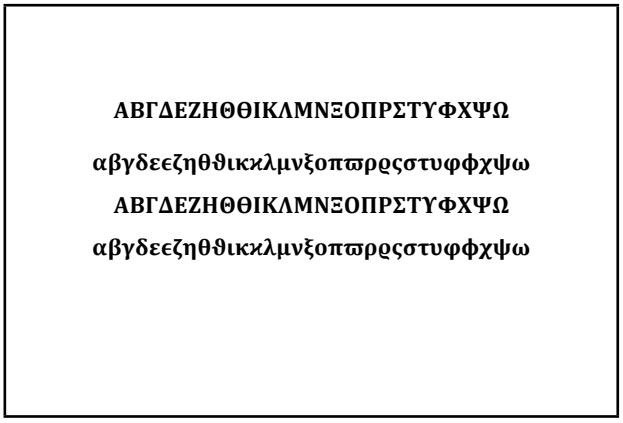


2.70 Test X018a

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

2.71 Test X018b

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



2.72 Test X019a

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

$$\mathbfit{\LATINtext}$$
$$\mathbfit{\latintext}$$
$$\mathbfit{\LATINmath}$$
$$\mathbfit{\latinmath}$$
$$\mathbfit{0123456789}$$

2.73 Test X019b

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

$$\mathbfit{\GREEKtext}$$
$$\mathbfit{\greektext}$$
$$\mathbfit{\GREEKmath}$$
$$\mathbfit{\greekmath}$$

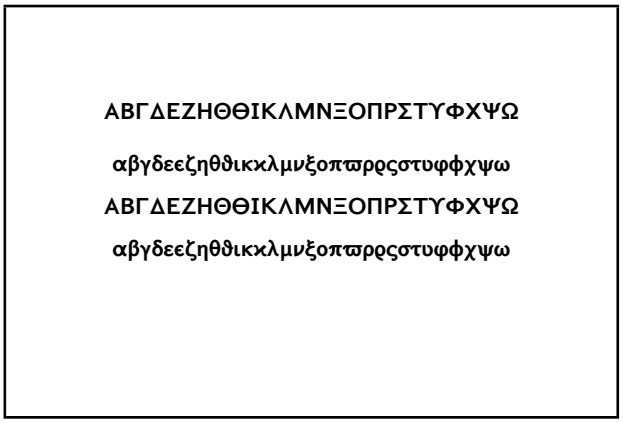
2.74 Test X020a

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

$$\mathbfsfit{\LATINtext}$$
$$\mathbfsfit{\latintext}$$
$$\mathbfsfit{\LATINmath}$$
$$\mathbfsfit{\latinmath}$$
$$\mathbfsfit{0123456789}$$

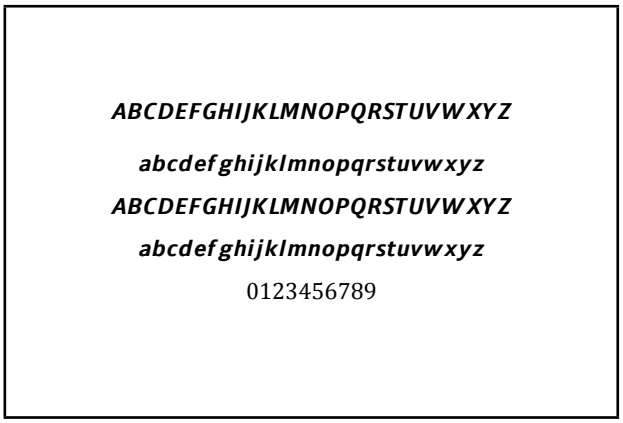
2.75 Test X020b

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



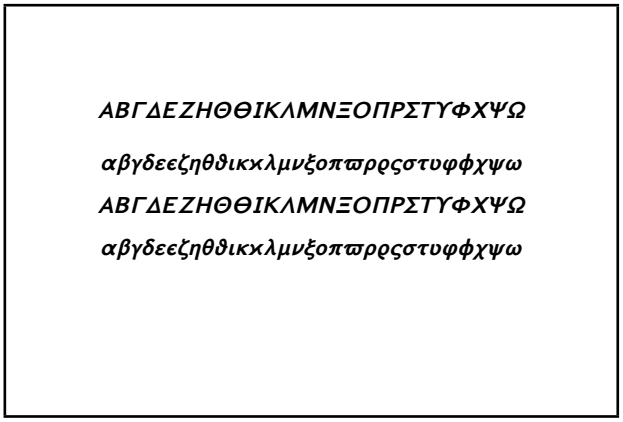
2.76 Test X021a

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



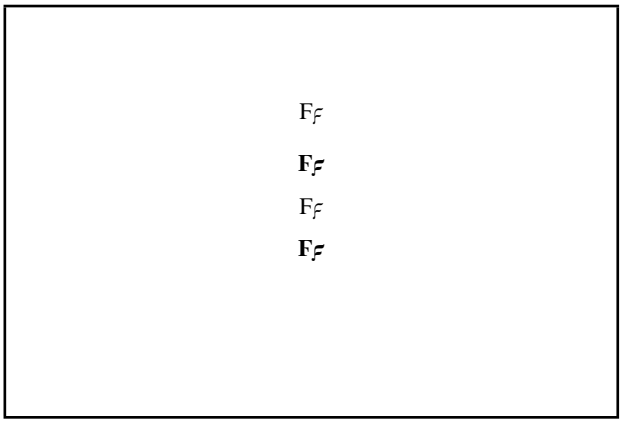
2.77 Test X021b

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



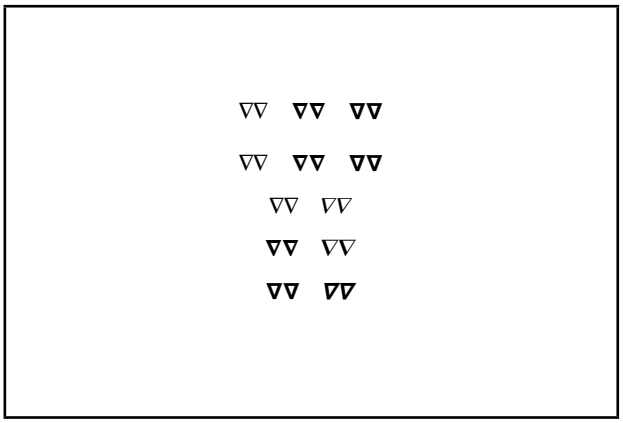
2.78 Test X030a

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



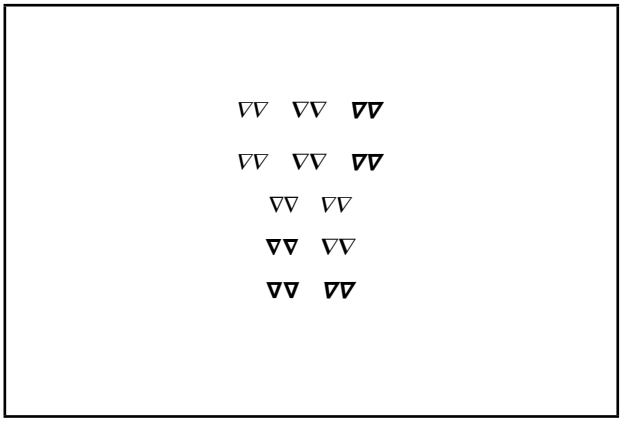
2.79 Test X031a

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



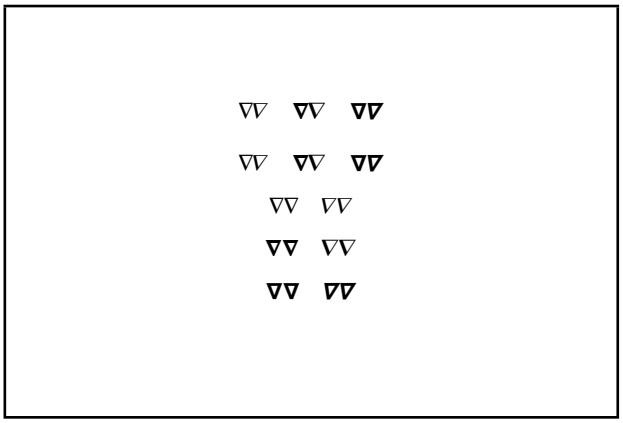
2.80 Test X031b

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



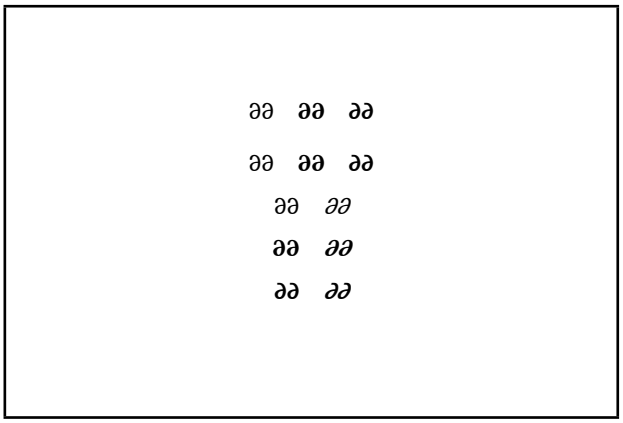
2.81 Test X031c

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



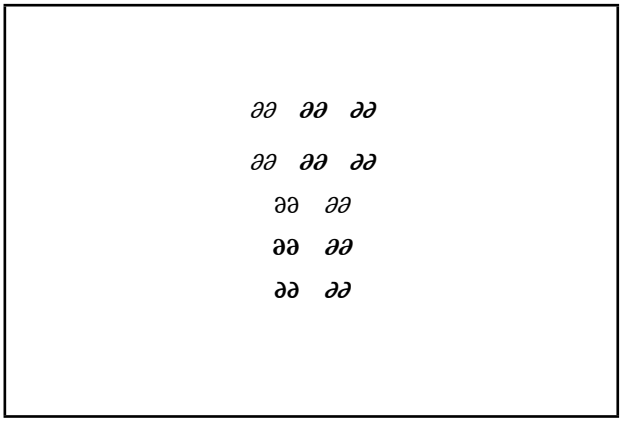
2.82 Test X032a

```
\input{umtest-preamble}
\usepackage[partial=upright]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[∂□ \quad □□ \quad □□\]
\[∂□ \quad \mathbf{∂□} \quad \mathbfsf{∂□}\]
\[\mathup{∂□} \quad \mathit{∂□}\]
\[\mathbfup{∂□} \quad \mathbfit{∂□}\]
\[\mathbfsfup{∂□} \quad  \mathbfsfit{∂□}\]
\end{document}
```



2.83 Test X032b

```
\input{umtest-preamble}
\usepackage[partial=italic]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[∂□ \quad □□ \quad □□\]
\[∂□ \quad \mathbf{∂□} \quad \mathbfsf{∂□}\]
\[\mathup{∂□} \quad \mathit{∂□}\]
\[\mathbfup{∂□} \quad \mathbfit{∂□}\]
\[\mathbfsfup{∂□} \quad  \mathbfsfit{∂□}\]
\end{document}
```



2.84 Test X032c

```
\input{umtest-preamble}
\usepackage[partial=literal]{unicode-math}
\setmathfont{Code2001}
\begin{document}
\[∂𝐀 \quad ∂𝛛 \quad ∂𝜕\]
\[∂𝐀 \quad \mathbf{∂𝐀} \quad \mathbfsf{∂𝐀}\]
\[\mathup{∂𝐀} \quad \mathit{∂𝐀}\]
\[\mathbfup{∂𝐀} \quad \mathbfit{∂𝐀}\]
\[\mathbfsfup{∂𝐀} \quad  \mathbfsfit{∂𝐀}\]
\end{document}
```

$$\partial\partial \quad \boldsymbol{\partial\partial} \quad \boldsymbol{\partial\partial}$$

$$\partial\partial \quad \boldsymbol{\partial\partial} \quad \boldsymbol{\partial\partial}$$

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

$$\boldsymbol{\partial\partial} \quad \boldsymbol{\partial\partial}$$

$$\boldsymbol{\partial\partial} \quad \boldsymbol{\partial\partial}$$

2.85 Test X033a

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

$$\imath\ \jmath$$

$$\mathrm{ı}\ \mathrm{ȷ}$$

$$\imath\ \jmath$$

$$\mathrm{ı}\ \mathrm{ȷ}$$

$$\mathrm{ı}\ \mathrm{ȷ}$$

$$\imath\ \jmath$$

2.86 Test X100a

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

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

2.87 Test X100b

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

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

2.88 Test X100c

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

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

2.89 Test X100d

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

\[ \left\vert \left\vert \left\vert \left\vert \left\vert \left\vert x^2
    \right\vert^2 \right\vert^2 \right\vert^2 \right\vert^2 \right\vert^2 \right\vert \]
\end{document}
```

$$\left|\left|\left|\left|\left|\left|x^2\right|^2\right|^2\right|^2\right|^2\right|^2\right|$$

$$\left\|\left\|\left\|\left\|\left\|\left\|x^2\right\|^2\right\|^2\right\|^2\right\|^2\right\|^2\right\|$$

2.90 Test X100e

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

\[ \left\Vert \left\Vert \left\Vert \left\Vert \left\Vert \left\Vert x^2
    \right\Vert^2 \right\Vert^2 \right\Vert^2 \right\Vert^2 \right\Vert^2 \right\Vert \]
\end{document}
```

$$\left\| \left\| \left\| \left\| \left\| \left\| x^2 \right\|^2 \right\|^2 \right\|^2 \right\|^2 \right\|^2 \right\|$$

$$\left\| \left\| \left\| \left\| \left\| \left\| x^2 \right\|^2 \right\|^2 \right\|^2 \right\|^2 \right\|^2 \right\|$$

2.91 Test X101a

```
\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}
```

$$a > b \quad c < d$$

$$\left\langle \left\langle \left\langle \left\langle x \right\rangle^2 \right\rangle^2 \right\rangle^2 \right\rangle^2$$

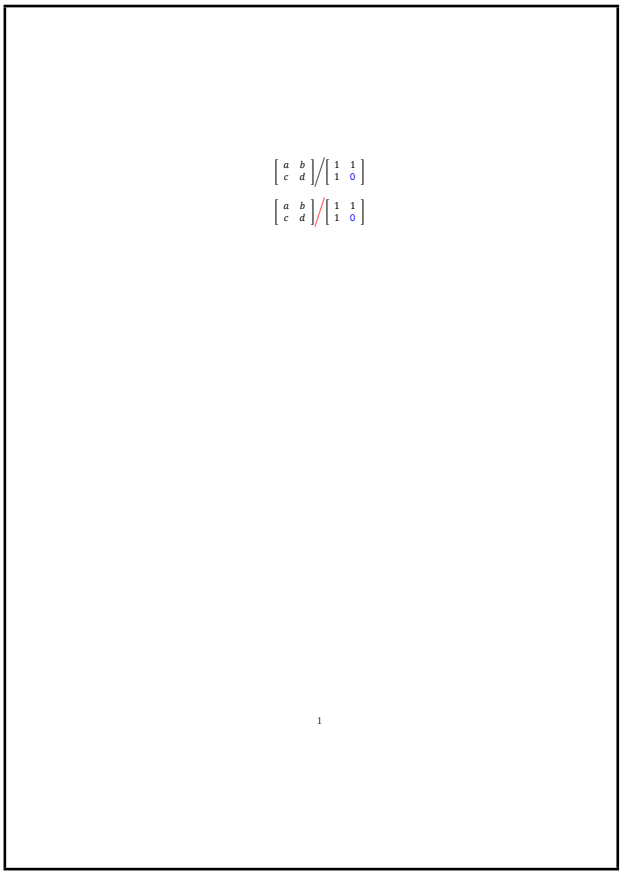
2.92 Test X102a

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

$$\left[\begin{array}{cc} a & b \\ c & d \end{array}\right] \Big/ \left[\begin{array}{cc} 1 & 1 \\ 1 & 0 \end{array}\right]$$

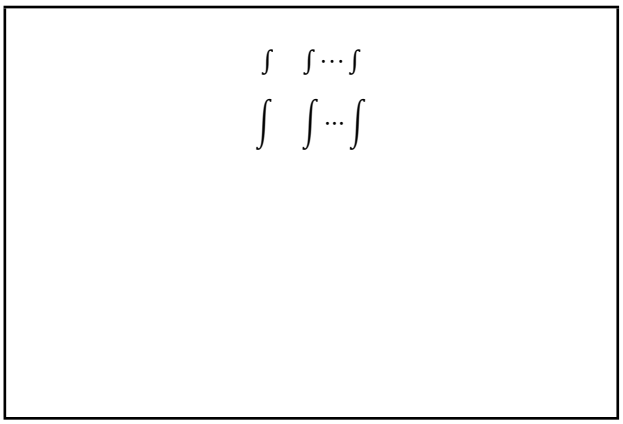
2.93 Test X102b

```
\documentclass{article}
\usepackage{unicode-math}
\begin{document}
\newcommand\ARRAY[4]{%
  \begin{array}{cc}
  #1 & #2 \\ #3 & #4
  \end{array}}
\def\test{\[
 \left.\left[\ARRAY a b c d\right]
 \middle\slash
       \left[\ARRAY 1 1 1 {\mathsf 0}\right]
 \right. \]}
\setmathfont
  [slash-delimiter=frac]{Cambria Math}
\setmathfont
  [range={\mathsfup},
   Color=0000FF]
  {STIXGeneral}
\test
\setmathfont
  [slash-delimiter=frac,
   range="2044,
   Color=FF0000]
  {Cambria Math}
\test
\end{document}
```



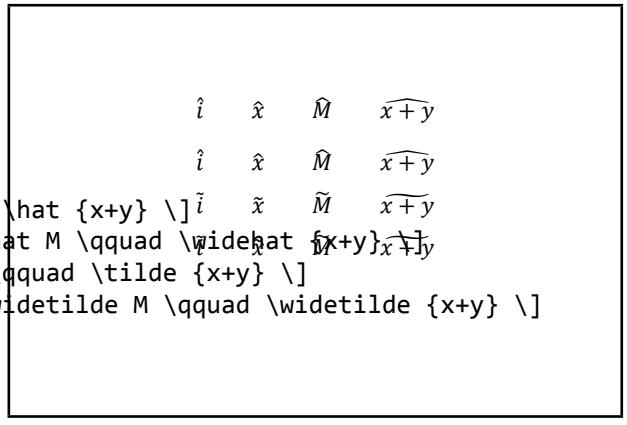
2.94 Test X150a

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



2.95 Test X151a

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



2.96 Test X200a

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

   $x□□□□$
   $x□□□□$
   $x□□$
   $x□$
\end{document}
```

$[x'''] [x''''''] [x'] [x'''] [x''''''] [x'] [x'''] [x''''''] x'''''''' x'''''''' x''' x'''$

2.97 Test X200b

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

   $x`□□□$
   $x□□□`$
   $x□□$
   $x□$
\end{document}
```

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

2.98 Test X201a

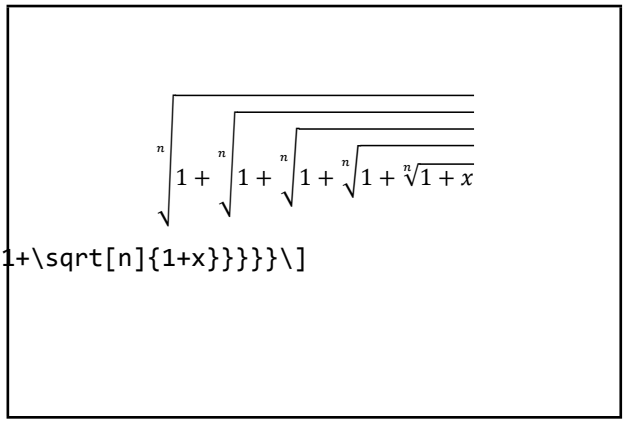
```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \sqrt{\sin^{2}x+\cos^{2}x}=1  \]
\[ \sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}\]
\end{document}
```

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

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}$$

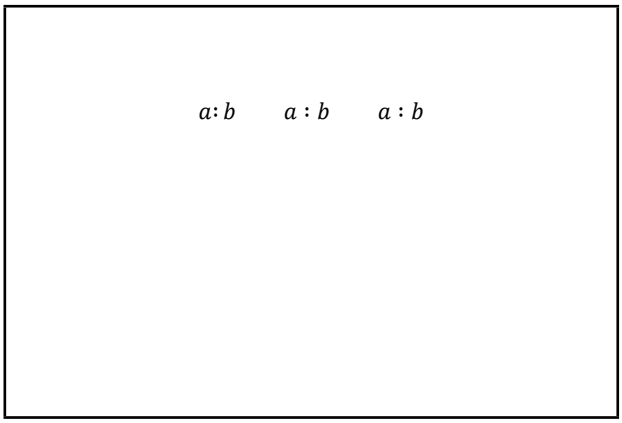
2.99 Test X201b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+x}}}}}\]
\end{document}
```



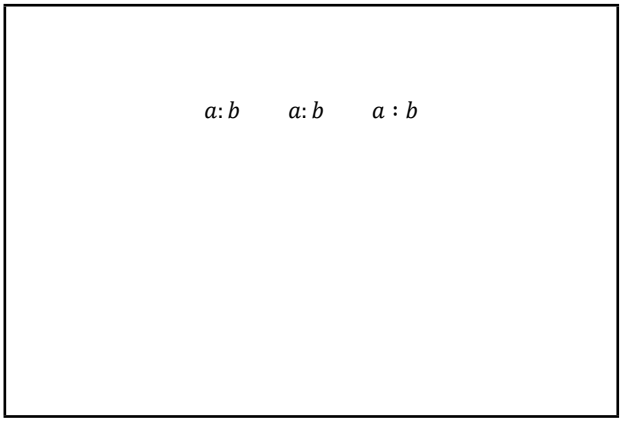
2.100 Test X202a

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



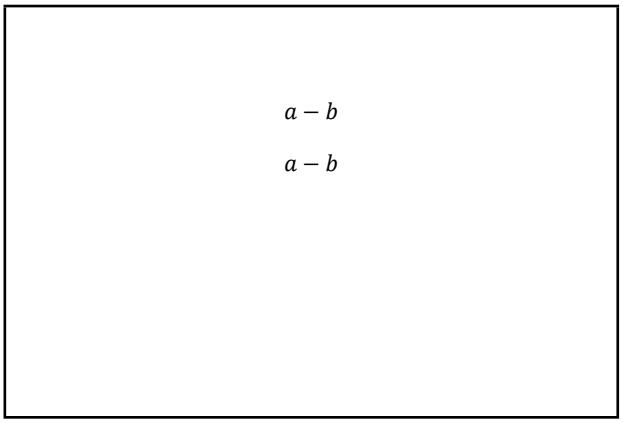
2.101 Test X202b

```
\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}
```



2.102 Test X203a

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

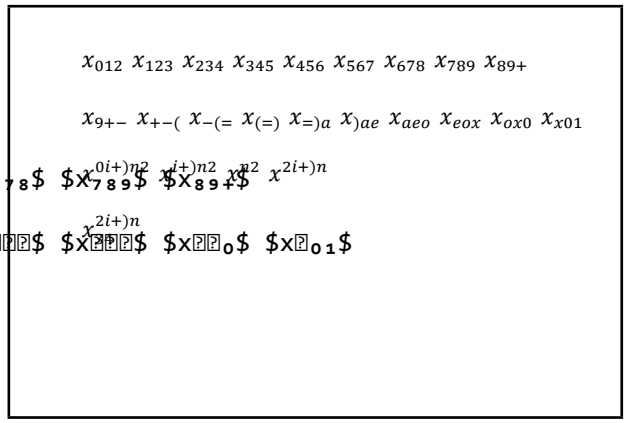


$$a - b$$

$$a - b$$

2.103 Test X204a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\setlength\parskip{12pt}
\begin{document}
$x_{012}$ $x_{123}$ $x_{234}$ $x_{345}$ $x_{456}$ $x_{567}$ $x_{678}$ $x_{789}$ $x_{89+}$

$x_{9+-}$ $x_{+-(}$ $x_{-(=}$ $x_{(=)}$ $x_{=)a}$ $x_{)ae}$ $x_{aeo}$ $x_{eox}$ $x_{ox0}$ $x_{x01}$

$x^{0i+)n2}$ $x^{i+)n2}$ $x^{n2}$ $x^{2i+)n}$

$x^{2i+)n}$

$x_{34}^{2i+)n}$
\end{document}
```



$$x_{012}\ x_{123}\ x_{234}\ x_{345}\ x_{456}\ x_{567}\ x_{678}\ x_{789}\ x_{89+}$$

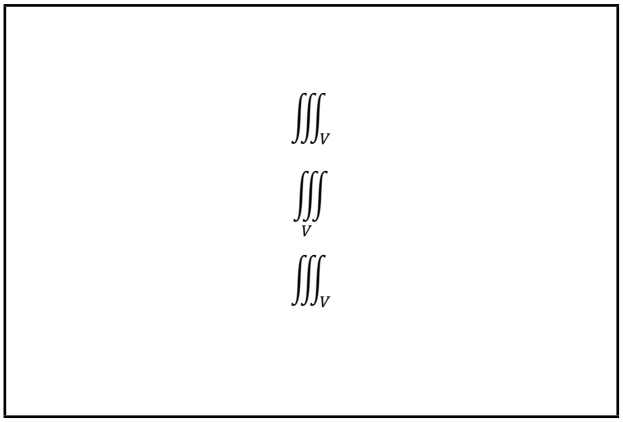
$$x_{9+-}\ x_{+-(}\ x_{-(=}\ x_{(=)}\ x_{=)a}\ x_{)ae}\ x_{aeo}\ x_{eox}\ x_{ox0}\ x_{x01}$$

$$x^{0i+)n2}\ x^{i+)n2}\ x^{n2}\ x^{2i+)n}$$

$$x^{2i+)n}$$

2.104 Test X205a

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



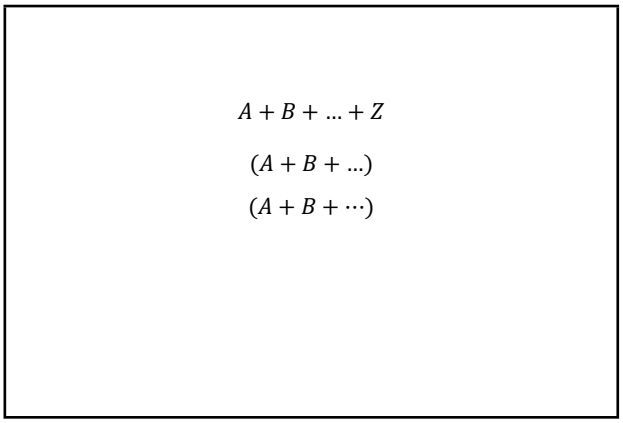
$$\iiint_V$$

$$\iiint_V$$

$$\iiint_V$$

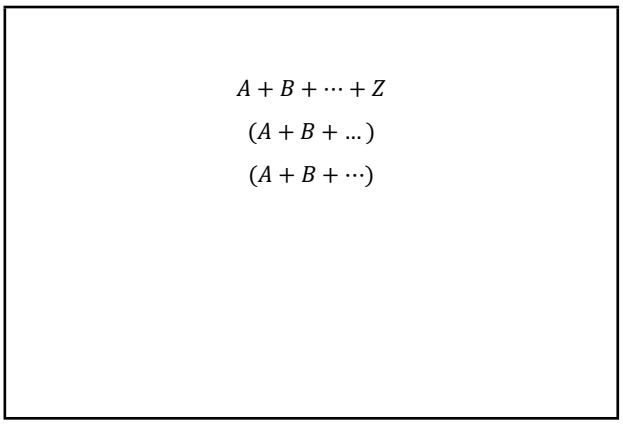
2.105 Test X206a

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



2.106 Test X206b

```
\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}
```

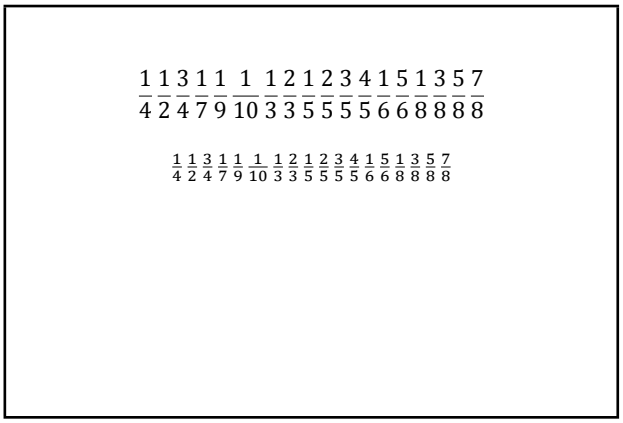


2.107 Test X206c

```
\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}
```

2.108 Test X207a

```
\input{umtest-preamble}
\usepackage{amsmath}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\unimathsetup{active-frac=normalsize}
\[ ¼ ½ ¾ ⅐ ⅑ ⅒ ⅓ ⅔ ⅕ ⅖ ⅗ ⅘ ⅙ ⅚ ⅛ ⅜ ⅝ ⅞ \]
\unimathsetup{active-frac=small}
\[ ¼ ½ ¾ ⅐ ⅑ ⅒ ⅓ ⅔ ⅕ ⅖ ⅗ ⅘ ⅙ ⅚ ⅛ ⅜ ⅝ ⅞ \]
\end{document}
```



2.109 Test X300a

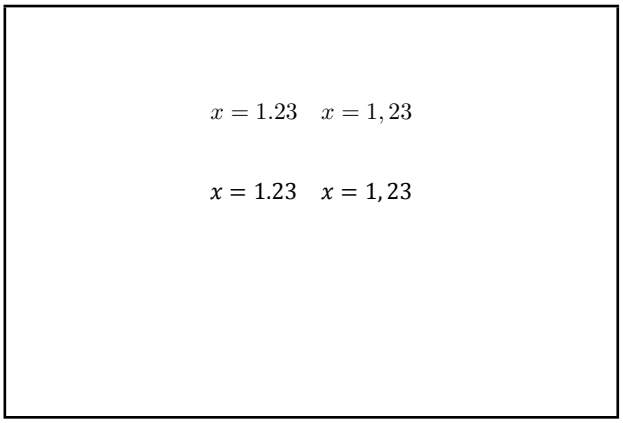
```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[script-font     =      {Asana Math},
             script-features =      {ScriptStyle,Colour=FF0000},
             sscript-font    =      {Cambria Math},
             sscript-features=      {ScriptScriptStyle,Colour=0000FF}]
            {Cambria Math}
\begin{document}
\[123456789^{123456789^{123456789}}\]
\end{document}
```

2.110 Test X400a

```
\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}
```

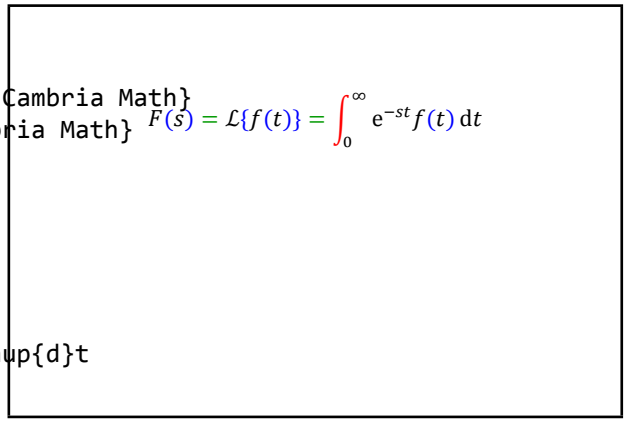
2.111 Test X401a

```
\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}
```



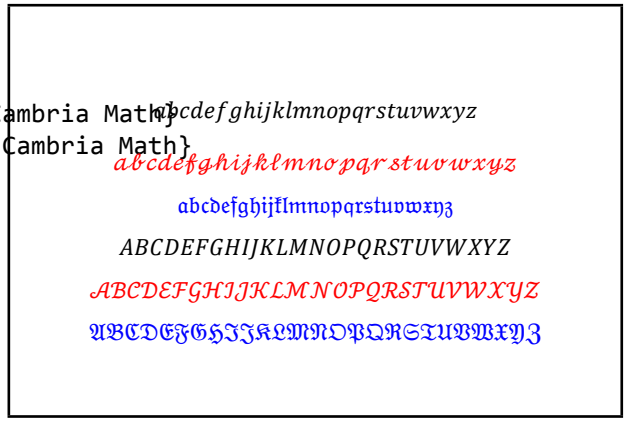
2.112 Test X500a

```
\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}
\[
  F(s)=\mathscr{L}\left\{f(t)\right\}=
    \int_0^\infty \mathup{e}^{-st}f(t)\,\mathup{d}t
\]
\end{document}
```



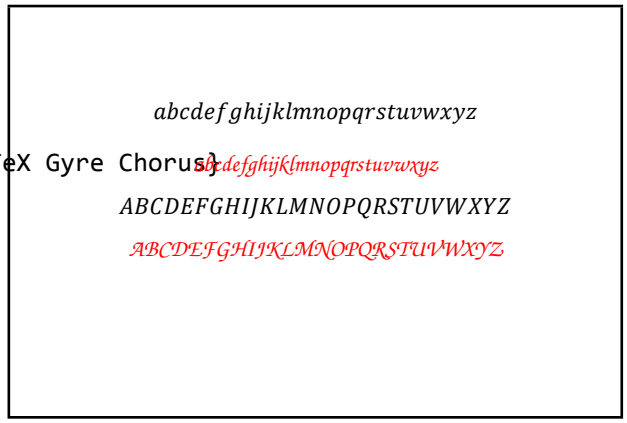
2.113 Test X501a

```
\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}
\[\latintext\]
\[\mathscr{\latintext}\]
\[\mathfrak{\latintext}\]
\[\LATINmath\]
\[\mathscr{\LATINmath}\]
\[\mathfrak{\LATINmath}\]
\end{document}
```



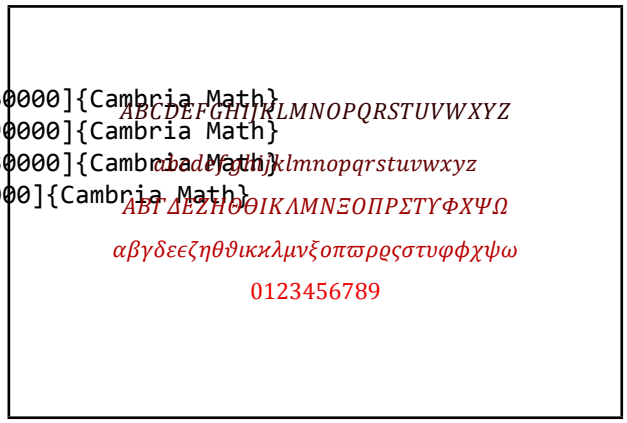
2.114 Test X501b

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



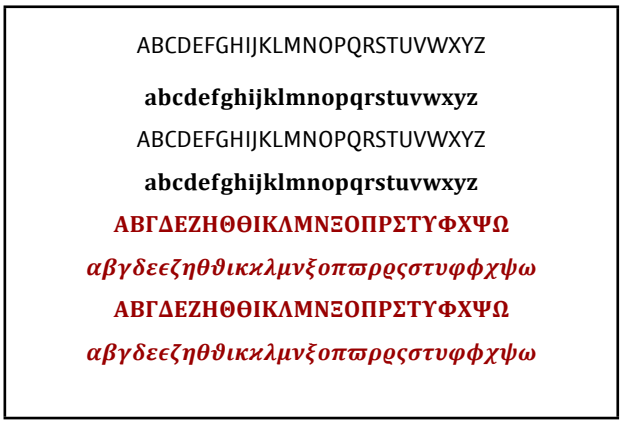
2.115 Test X501d

```
\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}
\[\mathit{\LATINtext}\]
\[\mathit{\latintext}\]
\[\mathit{\GREEKtext}\]
\[\mathit{\greektext}\]
\[0123456789\]
\end{document}
```



2.116 Test X501e

```
\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}
\[\LATINtext\]
\[\latintext\]
\[\mathit{\LATINtext}\]
\[\mathit{\latintext}\]
\[{\GREEKtext}\]
\[{\greektext}\]
\[\mathup{\GREEKtext}\]
\[\mathit{\greektext}\]
\end{document}
```



2.117 Test X502a

```
\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}
\[\mathit{A}\mathup{A}
  \mathsfup{A}\mathsfit{A}\]
\[\mathscr{A}\mathfrak{A}\mathbb{A}\]
\[\mathbfup{A}\mathbfit{A}
  \mathbfsfup{A}\mathbfsfit{A}\]
\[\mathbfscr{A}\mathbffrak{A}\]
\end{document}
```

$AAAA$

$\mathscr{A}\mathfrak{A}\mathbb{A}$

$\mathbf{A}\boldsymbol{AAA}$

$\boldsymbol{\mathscr{A}\mathfrak{A}}$

2.118 Test X502b

```
\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 Italic}
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:

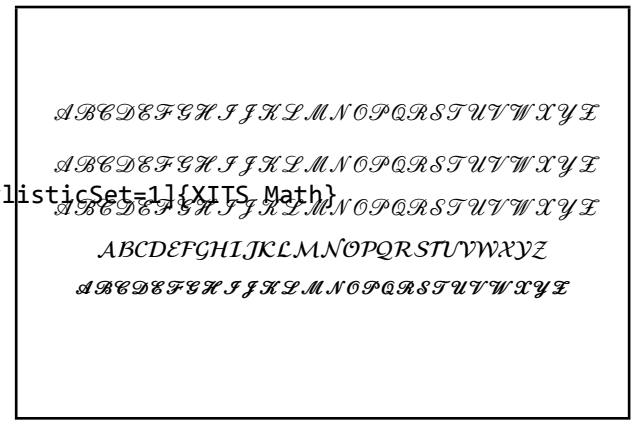
$$(a+b)^2 = \sqrt{c+d}$$

With symbols:

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

2.119 Test X503a

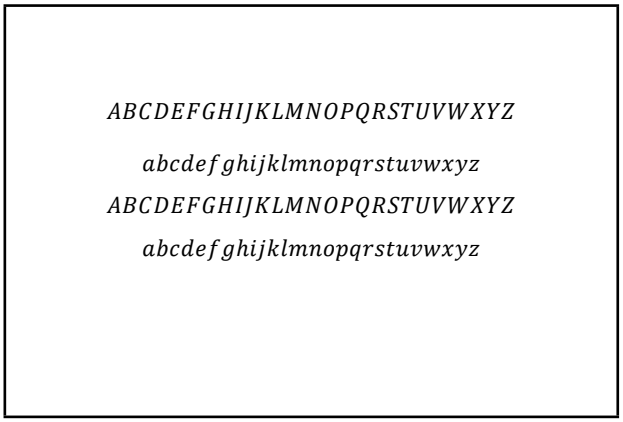
```
\input{umtest-preamble}
\usepackage{unicode-math}
\begin{document}
\setmathfont{XITS Math}
\[
  \mathscr{\LATINtext}
\]
\[
  \mathcal{\LATINtext}
\]
\setmathfont[range={\mathcal,\mathbfcal},StylisticSet=1]{XITS Math}
\[
  \mathscr{\LATINtext}
\]
\[
  \mathcal{\LATINtext}
\]
\footnotesize
\[
  \mathbfcal{\LATINtext}
\]
\end{document}
```



3 LuaLaTeX test files

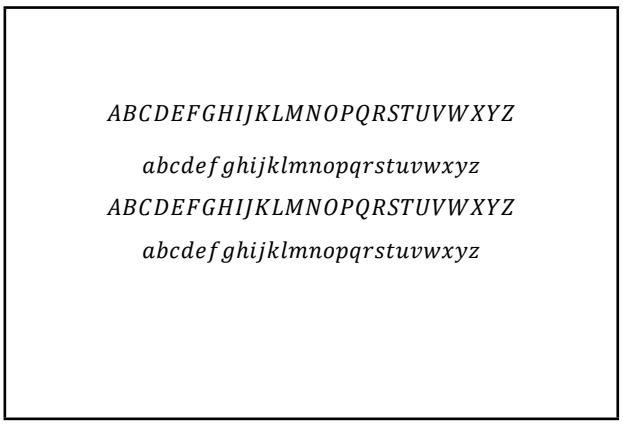
3.1 Test L001a

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



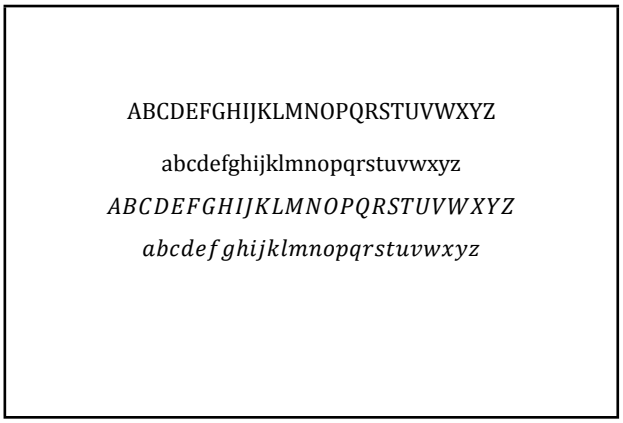
3.2 Test L001b

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



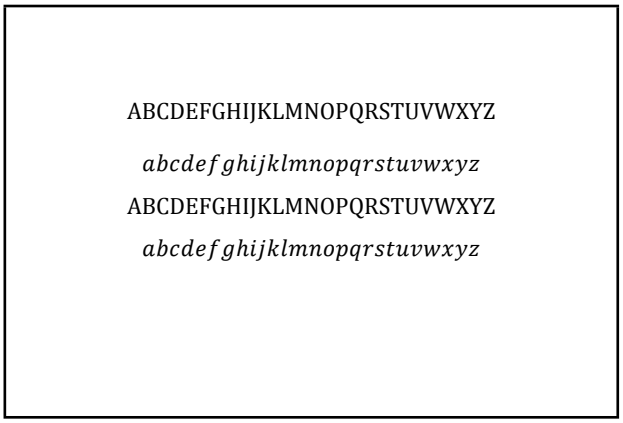
3.3 Test L001c

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



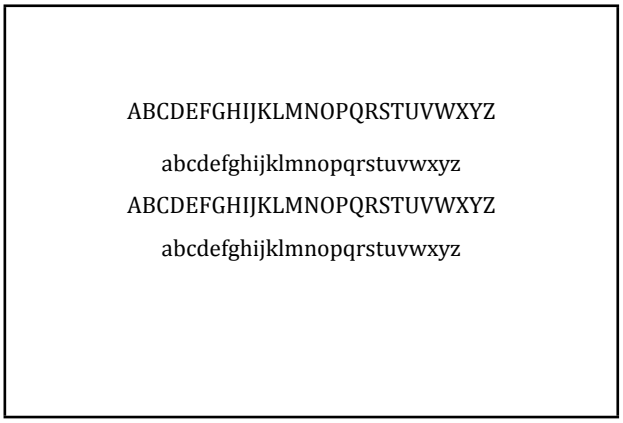
3.4 Test L001d

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



3.5 Test L001e

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



3.6 Test L102b

```
\documentclass{article}
\usepackage{unicode-math}
\begin{document}
\newcommand\ARRAY[4]{%
  \begin{array}{cc}
  #1 & #2 \\ #3 & #4
  \end{array}}
\def\test{\[
 \left.\left[\ARRAY a b c d\right]
 \middle\slash
       \left[\ARRAY 1 1 1 {\mathsf 0}\right]
 \right. \]}
\setmathfont
  [slash-delimiter=frac]{Cambria Math}
\setmathfont
  [range={\mathsfup},
   Color=0000FF]
  {STIXGeneral}
\test
\setmathfont
  [slash-delimiter=frac,
   range="2044,
   Color=FF0000]
  {Cambria Math}
\test
\end{document}
```

$$\left[\begin{array}{cc} a & b \\ c & d \end{array}\right] \middle/ \left[\begin{array}{cc} 1 & 1 \\ 1 & 0 \end{array}\right]$$

$$\left[\begin{array}{cc} a & b \\ c & d \end{array}\right] \Big/ \left[\begin{array}{cc} 1 & 1 \\ 1 & 0 \end{array}\right]$$

1

3.7 Test L201a

```
\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}
```

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

$$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}$$

3.8 Test L201b

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+x}}}}}\]
\end{document}
```

$$\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+\sqrt[n]{1+x}}}}}$$