#### The unicode-math test suite

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#### **Preamble**

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

#### 1 Test 001a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

#### 2 Test 001b

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

#### 3 Test 001c

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

#### 4 Test 001d

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

#### 5 Test 001e

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ  $\alpha \beta \gamma \delta \varepsilon \epsilon \zeta \eta \theta \vartheta \iota \kappa \kappa \lambda \mu \nu \xi \sigma \tau \varpi \rho \varrho \zeta \sigma \tau \upsilon \phi \phi \chi \psi \omega$   $A B \Gamma \Delta E Z H Θ Θ I Κ Λ ΜΝΞΟΠΡΣΤΥΦ Χ Ψ Ω$ 

αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 7 Test 002b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωρρςςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωρρςςστυφφχψω

#### 8 Test 002c

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

 $AB\Gamma\Delta EZH\Theta\Theta IK\Lambda MN\Xi O\Pi P\Sigma T\Upsilon\Phi X\Psi\Omega$ 

αβγδεεζηθθικκλμνξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 9 Test 002d

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 10 Test 002e

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 11 Test 003a

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

#### 12 Test 003b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 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}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

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}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 15 Test 003e

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

#### 16 Test 003f

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 17 Test 003g

```
\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}
```

#### 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}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 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}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωροςστυφφχψω αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 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

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

#### 22 Test 0031

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω αβγδεεζηθθικκλμυξοπωροςστυφφχψω

#### 23 Test 003m

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

#### 24 Test 003n

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω αβγδεεζηθθικκλμυξοπωροςστυφφχψω

#### 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}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
αβγδεεζηθθικκλμνξοπωροςστυφφχψω
αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 27 Test 004a

```
\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

#### 28 Test 004b

```
\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

#### 29 Test 004c

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

#### 30 Test 004d

```
\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}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

#### 31 Test 004e

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

#### 32 Test 004f

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

#### 33 Test 005a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

#### 34 Test 005b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
αβγ∂εεζηθ9ικικλμνξοπωροςστυφ9χψω
αβγ∂εεζηθ9ικικλμνξοπωροςστυφ9χψω

#### 35 Test 005c

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

#### 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
αβγ∂εεζηθ9ικικλμνξοπωροςστυφφχψω
αβγ∂εεζηθ9ικικλμνξοπωροςστυφφχψω

#### 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}
\[\GREEKmathbfsfup\]
\[\GREEKmathbfsfit\]
\[\greekmathbfsfit\]
\[\greekmathbfsfit\]
\end{document}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
αβγ∂εεζηθ9ικιλμνξοπωροςστυφ9χψω
αβγ∂εεζηθ9ικιλμνξοπωροςστυφ9χψω

#### 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}
```

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
αβγ∂εεζηθθικυλμνζοπωρρςστυφφχψω
αβγ∂εεζηθθικυλμνζοπωρρςστυφφχψω

#### 41 Test 005i

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

#### 42 Test 005j

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

αβγδεεζηθθικιλμνξοπωροςστυφθχψω

αβγδεεζηθθικιλμνζοπωροςστυφθχψω

#### 43 Test 005k

```
\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}
```

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

0123456789

#### 44 Test 0051

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ
αβγδεεζηθθικιλμνξοπωροςστυφφχψω
αβγδεεζηθθικιλμνξοπωροςστυφφχψω

#### 45 Test 010a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

#### 46 Test 010b

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz

#### 47 Test 010c

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

uvedeteszzkemndpakszuvwxyz

abcdefghijłlmnopqrstuvwxyz

uvedeteszzkemndpakszuvwxyz

abcdefghijłlmnopqrstuvwxyz

#### 48 Test 010d

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

UBCDEFGHIJKUMNOPQHSTUBWXY3

abcdefghijtImnopqrstubwxy3

#### 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}

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΎΦΧΨ $\Omega$   $\alpha$ βγδεεζηθθικκλμνξοπ $\omega$ ροςστυφφχψ $\omega$  ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΎΦΧΨ $\Omega$ 

αβγδεεζηθθικκλμνξοπωροςστυφφχψω

#### 51 Test 012a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdef ghijklmnopqrstuvwxyz

#### 52 Test 012b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωρρςςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμνξοπωρρςςστυφφχψω

#### 53 Test 013a

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

```
\label{eq:linear_cont} $$ \sup_{\sigma \in \mathbb{R}} \end{superstylength} $$ \operatorname{STIXGeneral} $$ \left( \operatorname{TIYGeneral} \right) $$ \left( \operatorname{TIYGenerall} \right) $$ \left( \operatorname{TIYGeneral
```

```
\begin{array}{ccc} \mathfrak{mlyr} & \mathfrak{mlyr} \\ & \sum_{0}^{1} \\ & \sum_{0}^{1} \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &
```

#### 57 Test 013e

\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[\mathbbit{Ddeij}\qquad\mathbbit{22222}\]
\end{document}

Ddeij Ddeij

#### 58 Test 014a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

#### 61 Test 015a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

0123456789

#### 62 Test 015b

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

01234567890123456789

#### 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}
\[\mathbfscr{\LATINtext}\]
\[\mathbfscr{\latintext}\]
\[\mathbfscr{\LATINmath}\]
\[\mathbfscr{\latinmath}\]
\end{document}

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

#### 67 Test 017b

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

#### 68 Test 017c

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

ABEDEFGHIJKEMNOPQRSTUBWXY3

ABEDEFGHIJKIMnopqrstubwxy3

ABEDEFGHIJKIMnopqrstubwxy3

#### 69 Test 017d

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

ABCDEFGHIJKEMNOPQRSTUBWXYJ abcdefghijfImnopqrstubwxyz

#### 70 Test 018a

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

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

#### 71 Test 018b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω

#### 72 Test 019a

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

## ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

0123456789

#### 73 Test 019b

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

ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθθικκλμυξοπωροςστυφφχψω

#### 74 Test 020a

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

*ABCDEFGHIJKLMNOPQRSTUVWXYZ* 

abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

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 αβγδεεζηθδικκλμυξοπωροςστυφφχψω ΑΒΓΔΕΖΗΘΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ αβγδεεζηθδικκλμυξοπωροςστυφφχψω

#### 76 Test 021a

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

#### 78 Test 030a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{FreeSerif}
\begin{document}
\[22\]
\[22\]
\[\mathup{22}\]
\[\mathup{22}\]
\end{document}
```

### F<sub>F</sub> F<sub>F</sub> F<sub>F</sub>

#### 79 Test 031a

```
\input{umtest-preamble}
\usepackage[nabla=upright] {unicode-math}
\setmathfont{Free Serif}
\begin{document}
\[22 \quad 22 \quad 22\]
\[22 \quad \mathbf{22} \quad \mathbfsf{22}\]
\[\mathup{22} \quad \mathbfit{22}\]
\[\mathbfup{22} \quad \mathbfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
\end{document}
```

\textstyle \textstyle

#### 80 Test 031b

```
\input{umtest-preamble}
\usepackage[nabla=italic] {unicode-math}
\setmathfont{Free Serif}
\begin{document}
\[22 \quad 22 \quad 22\]
\[22 \quad \mathbf{22} \quad \mathbfsf{22}\]
\[\mathup{22} \quad \mathbfit{22}\]
\[\mathbfup{22} \quad \mathbfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
```

 VV
 VV
 VV

 VV
 VV
 VV

 VV
 VV

 VV
 VV

 VV
 VV

#### 81 Test 031c

```
\input{umtest-preamble}
\usepackage[nabla=literal] {unicode-math}
\setmathfont{Free Serif}
\begin{document}
\[22 \quad 22 \quad 22\]
\[22 \quad \mathbf{22} \quad \mathbfsf{22}\]
\[\mathup{22} \quad \mathbfsf{22}\]
\[\mathbfup{22} \quad \mathbfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
\[\mathbfsfup{22} \quad \mathbfsfit{22}\]
\end{document}
```

## \(\nabla \nabla \nabla

#### 82 Test 032a

```
\input{umtest-preamble}
\usepackage[partial=upright]{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[∂② \quad ②② \quad ②②\]
\[∂② \quad \mathbf{∂②} \quad \mathbfsf{∂②}\]
\[\mathup{∂②} \quad \mathbfit{∂②}\]
\[\mathbfsfup{∂②} \quad \mathbfit{∂②}\]
\[\mathbfsfup{∂②} \quad \mathbfsfit{∂②}\]
\[\mathbfsfup{∂②} \quad \mathbfsfit{∂②}\]
\end{document}
```

66 66 66 66 66 66 66 66

#### 83 Test 032b

∂∂ 66 66 ∂∂ ∂∂ ∂∂ ∂∂ ∂∂ 66 66 66

#### 84 Test 032c

```
\input{umtest-preamble}
\usepackage[partial=literal]{unicode-math}
\setmathfont{Asana Math}
\begin{document}
\[\delta \quad \text{2D}\]
\[\delta \quad \mathbf{\delta \text{2D}}\]
\[\mathup{\delta \text{2D}}\]
\[\mathbfup{\delta \text{2D}}\]
\[\mathbfsfup{\delta \text{2D}}\
```

∂∂ **∂**∂ **ठठ** ∂∂ **∂**∂ **ठठ** ∂∂ ∂∂ **∂∂** ∂∂ **ठठ** ठठ

#### 85 Test 033a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\begin{document}
\setmathfont[math-style=TeX]{Free Serif}
\[12\quad 22\]
\[\mathup{12}\quad \mathup{22}\]
\[\mathit{12}\quad \mathit{22}\]
\setmathfont[math-style=upright]{Free Serif}
\[12\quad 22\]
\[\mathup{12}\quad \mathup{22}\]
\[\mathup{12}\quad \mathup{22}\]
\[\mathit{12}\quad \mathit{22}\]
\[\mathit{12}\quad \mathit{22}\]
\[\mathit{12}\quad \mathit{22}\]
\[\mathit{12}\quad \mathit{22}\]
\[\mathit{12}\quad \mathit{22}\]
```

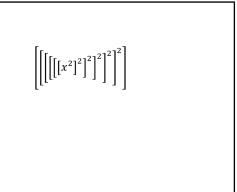
y
y
y
y
y
y
y
y
y

#### 86 Test 100a

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

#### 87 Test 100b

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



#### 88 Test 100c

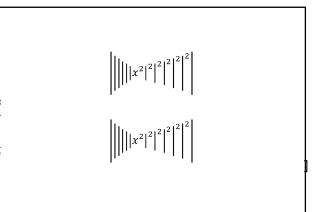
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \left\{ \left\{ \left\{ \left\{ \left\\ \left\\ \right\\}^2 \right\\}^2 \right\\}^2 \right\\}^2 \right\\}^2 \right\\}^2



#### 89 Test 100d

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

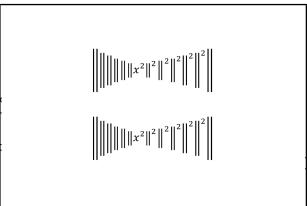
\[ \left\vert \left\vert \left\vert
\right\vert^2 \right\vert^2 \right\vert^2
\end{document}



#### 90 Test 100e

\input{umtest-preamble}

```
\usepackage{unicode-math}
\setmathfont{Cambria Math}
\begin{document}
\[ \left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin}\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\begin{\left\beta}\begin{\left\begin{\left\begin{\left\begin}\begin}\begin}\begin\begin{\left\begin}\begin{\left\begin}\begin{\left\begin}\begin{\left\begin}\begin}\begin}\begin\begin{\left\begin}\begin}\begin\begin\begin}\begin\begin}\begin\begin\begin\begin}\begin\begin\begin}\begin\begin\begin\begin}\begin\begin\begin}\begin\begin\
```



#### 91 Test 101a

\end{document}

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

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

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

#### 92 Test 102a

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

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

#### 93 Test 150a

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

```
∫ ∫...∫
```

#### 94 Test 151a

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

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

#### 95 Test 200a

```
\input{umtest-preamble}
\usepackage{amsmath,unicode-math}
\setmathfont{Cambria Math}
\begin{document}
  [${x\prime\prime\prime}$]
  [${x\prime\prime\prime\prime\prime}$]
  [${x'}$]
  [${x'''}$1
  [${x''''}$]
  [${x2}$]
  [${x222}$]
  [${x22'2\prime2}$]
  $x2222$
  $x2222$
  $x22$
  $x2$
\end{document}
```

```
\begin{bmatrix} x''' \end{bmatrix} \begin{bmatrix} x''''' \end{bmatrix} \begin{bmatrix} x'' \end{bmatrix} \begin{bmatrix} x''' \end{bmatrix} \begin{bmatrix} x''''' \end{bmatrix} \begin{bmatrix} x''''' \end{bmatrix} \begin{bmatrix} x'''''' \end{bmatrix} \begin{bmatrix} x'''''' \end{bmatrix}
```

#### 96 Test 200b

```
\input{umtest-preamble}
\usepackage{amsmath,unicode-math}
\setmathfont{Asana Math}
\begin{document}
   [${x\backprime\backprime\$]
   [${x\backprime\backprime\backprime\backprime
   [${x`}$]
  [${x```}$]
[${x````}$]
   [${x2}$]
   [${x???}$]
   [${x22\2\backprime2}$]
  $x`222$
  $x222`$
  $x22$
   $x2$
\end{document}
```

## 

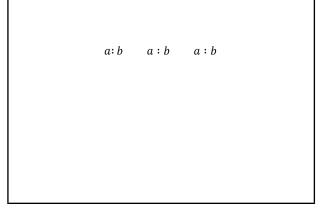
#### 97 Test 201a

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

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

#### 98 Test 202a

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



#### 99 Test 202b

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

a:b a:b a:b

#### 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}
$x_{012}$ $x_{123}$ $x_{234}$ $x_{345}$ $x_{456}$ $x_{567}$ $x_{67}$
$x_{9+-}$ $x_{+-}($ $x_{-}($ $x_{-})$ $x_{-})2$ $x_{2}2$ $x_{2}2$
$x_{9+-}$ $x_{2}4$ $x_{2}4$ $x_{2}4$
$x_{34}22+123$ $x_{2}4$ $x_{2}4$
$x_{34}22+123$ $x_{2}4$ $x_{2}4$
\end{document}
```

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

#### 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}

# $\iiint_{v}$ $\iiint_{v}$

#### 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}

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

#### 104 Test 206b

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

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

#### 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

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

#### 107 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="~!@#\$%^&\*()<>`'

#### 108 Test 500a

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

#### 109 Test 501a

```
\input{umtest-preamble}
\usepackage{unicode-math}
\setmathfont[Colour=000000]{Cambria Math}
\setmathfont[range=\mathscr, Colour=FF0000]{Ca}
\setmathfont[range=\mathfrak, Colour=0000FF]{0}
\begin{document}
\[\latintext\]
\[\mathscr{\latintext}\]
\[\mathfrak{\latintext}\]
\[\mathfrak{\latintext}\]
\[\mathscr{\LATINmath}\]
\[\mathfrak{\LATINmath}\]
\[\mathfrak{\LATINmath}\]
\[\mathfrak{\document}
```

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopgrstuvwxyz
abcdefghijtlmnopgrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ABCDEFGHIJKLMNOPQRSTUVWXYZ
UBCDEFGHJJKLMNOPQRSTUVWXYZ

#### 110 Test 501b

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

abcdefghijklmnopqrstuvwxyz

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

ABCDEFGHIJKLMNOPQRSTUVWXYZ