MathML Torture Test

Safari -- 11/21/2011 -- iOS 5.01 w/native fonts

NOTES:

1. Alternate stylesheets are available from: View → Page Style → STIX | Asana Math
2. Right click on a MathML fragment and choose View MathML Source to get its source.
3. In the examples below, the text won't be allowed to decrease pass the scriptminsize or your browser's minimum allowable font size -- this can be set with Tools → Options → Content tab → Fonts & Colors → Advanced button → Minimum font size. To see the effect of the gradual decrease induced by changes in script levels more clearly, you may have to increase your default font size in the menu: Tools → Options → Content tab → Fonts & Colors → Size.
   - Here is how the alphabet looks like at scriptminsize: *a, b, c ... x, y, z*
   - Here is how greek letters look like at scriptminsize: *α, β, γ ..., ψ, ω, ϑ, ϒ, ϖ*
   - Here is how numbers look like at scriptminsize: 0, 1, 2, ..., 10, 11, 12, ...
4. You can use View → Zoom → Text Zoom only checked in the usual way to zoom the MathML text along with the other text.
5. The text written that way in the above remarks describes items in the menu bar. If you only see the Firefox menu, you can enable the menu bar with Firefox → Options → Menubar.

	As rendered by TeX	As rendered by your browser
1	x^2y^2	x^2y^2
2	${}_2F_3$	$F\,3\,2$
3	$\frac{x+y^2}{k+1}$	$\frac{x+y^2}{k+1}$
4	$x+y^{\frac{2}{k+1}}$	$x+y^{\frac{2}{k+1}}$
5	$\frac{a}{b/2}$	$\frac{a}{b/2}$
6	$a_0+\cfrac{1}{a_1+\cfrac{1}{a_2+\cfrac{1}{a_3+\cfrac{1}{a_4}}}}$	$a_0+\cfrac{1}{a_1+\cfrac{1}{a_2+\cfrac{1}{a_3+\cfrac{1}{a_4}}}}$

7	$a_0 + \cfrac{1}{a_1 + \cfrac{1}{a_2 + \cfrac{1}{a_3 + \cfrac{1}{a_4}}}}$	$a_0+\cfrac{1}{a_1+\cfrac{1}{a_2+\cfrac{1}{a_3+\cfrac{1}{a_4}}}}$
8	$\binom{n}{k/2}$	$\left[\begin{matrix} n \\ k/2 \end{matrix}\right]$
9	$\binom{p}{2} x^2 y^{p-2} - \frac{1}{1-x}\frac{1}{1-x^2}$	$\left[\begin{matrix} p \\ 2 \end{matrix}\right] x^2 y^{p-2} - \frac{1}{1-x}\frac{1}{1-x^2}$
10	$\sum_{\substack{0 \le i \le m \\ 0 < j < n}} P(i,j)$	$\sum_{\substack{0 \le i \le m \\ 0 < j < n}} P(i,j)$
11	x^{2y}	x^{2y}
12	$\sum_{i=1}^{p} \sum_{j=1}^{q} \sum_{k=1}^{r} a_{ij} b_{jk} c_{ki}$	$\sum_{i=1}^{p} \sum_{j=1}^{q} \sum_{k=1}^{r} a_{ij} b_{jk} c_{ki}$
13	$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}}$	$\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+x}}}}}}$
14	$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2}\right) \left\vert \varphi(x+iy) \right\vert^2 = 0$	$\left(\frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial y^2}\right) \left\vert \varphi\,(x+\mathrm{i}y) \right\vert^2 = 0$
15	$2^{2^{2^x}}$	$2^{2^{2^x}}$
16	$\int_1^x \frac{dt}{t}$	$\int_1^x \frac{dt}{t}$

17	$\iint_D dx\,dy$	$\iint_D dx\ dy$
18	$f(x) = \begin{cases} 1/3 & \text{if } 0 \le x \le 1; \\ 2/3 & \text{if } 3 \le x \le 4; \\ 0 & \text{elsewhere.} \end{cases}$	$f(x)=\begin{cases} 1/3 & \text{if } 0\le x\le 1; \\ 2/3 & \text{if } 3\le x\le 4; \\ 0 & \text{elsewhere.} \end{cases}$
19	$\overbrace{x+\cdots+x}^{k \text{ times}}$	$\overbrace{x+\ldots+x}^{k\text{times}}$
20	y_{x^2}	y_{x^2}
21	$\sum_{p \text{ prime}} f(p) = \int_{t>1} f(t)\,d\pi(t)$	$\sum_{p \text{ prime}} f(p)=\int_{t>1} f(t)\ d\pi(t)$
22	$\{\overbrace{a,\ldots,a}^{k\ a's},\overbrace{b,\ldots,b}^{l\ b's}\}$ $k+l$ elements	$\{\overbrace{a,\ldots,a}^{k\ a's},\overbrace{b,\ldots,b}^{\ell\ b's}\}$ $k+\ell$ elements
23	$\begin{pmatrix} \begin{pmatrix} a & b \\ c & d \end{pmatrix} & \begin{pmatrix} e & f \\ g & h \end{pmatrix} \\ 0 & \begin{pmatrix} i & j \\ k & l \end{pmatrix} \end{pmatrix}$	$\begin{pmatrix} \begin{pmatrix} a & b \\ c & d \end{pmatrix} & \begin{pmatrix} e & f \\ g & h \end{pmatrix} \\ 0 & \begin{pmatrix} i & j \\ k & l \end{pmatrix} \end{pmatrix}$
24	$\det \begin{vmatrix} c_0 & c_1 & c_2 & \cdots & c_n \\ c_1 & c_2 & c_3 & \cdots & c_{n+1} \\ c_2 & c_3 & c_4 & \cdots & c_{n+2} \\ \vdots & \vdots & \vdots & & \vdots \\ c_n & c_{n+1} & c_{n+2} & \cdots & c_{2n} \end{vmatrix} > 0$	$\det \begin{pmatrix} c_0 & c_1 & c_2 & \cdots & c_n \\ c_1 & c_2 & c_3 & \cdots & c_{n+1} \\ c_2 & c_3 & c_4 & \cdots & c_{n+2} \\ \vdots & \vdots & \vdots & & \vdots \\ c_n & c_{n+1} & c_{n+2} & \cdots & c_{2n} \end{pmatrix} > 0$

25	y_{x_2}	y_{x_2}
26	$x_{92}^{31415} + \pi$	$x_{92}^{31415}+\pi$
27	$x_{y_b^a}^{z_c^d}$	$x_{y_b^a}^{z_c^d}$
28	y_3'''	y_3''' y_3'''