

MathJax

"MathJax is a cross-browser JavaScript library that displays mathematical equations in web browsers, using LaTeX math and MathML markup. MathJax is released as open-source software under the Apache license."

Source: <http://en.wikipedia.org/wiki/MathJax>

Tiki20+

Native support was added via <https://sourceforge.net/p/tikiwiki/code/68624> and should appear here: <https://packages.tiki.org/>

Before Tiki 20

Add the following line to tiki-admin.php -> Look and Feel -> Custom HTML <head> Content:

To include in all pages

```
<script type="text/javascript"
  src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS-MML_HTMLorMML">
</script>
```

To include only in one page (choose your own page name)

```
{if $page eq 'MathJax'}
<script type="text/javascript"
  src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS-MML_HTMLorMML">
</script>
{/if}
```

The other possibility (working in http and https) is to install (copy) the MathJax locally as described at: <http://docs.mathjax.org/en/latest/installation.html> for example to "./add_mathjax" directory and add to tiki-admin.php -> Look and Feel -> Custom HTML <head> Content:

For local instalation

```
<script type="text/javascript"
src="./add_mathjax/MathJax.js?config=TeX-AMS-MML_HTMLorMML">
</script>
```

Then, just use math in your page using [PluginHTML](#). It will sometimes work without that but there can be conflicts with wiki syntax or other code. Click [here](#) to see the source of the current wiki page for an example.

Nice presentation won't load just after you save a page. So after saving, go to another page, and click back to your page

Below are math samples copied from <http://www.mathjax.org/demos/tex-samples/>. Right-click on the formulae for more options.

The Lorenz Equations

```
\[ \begin{aligned} \dot{x} &= \sigma(y-x) \\ \dot{y} &= \rho x - y - xz \\ \dot{z} &= -\beta z + xy \end{aligned} \]
```

The Cauchy-Schwarz Inequality

$$\left(\sum_{k=1}^n a_k b_k \right)^2 \leq \left(\sum_{k=1}^n a_k^2 \right) \left(\sum_{k=1}^n b_k^2 \right)$$

A Cross Product Formula

$$\mathbf{V}_1 \times \mathbf{V}_2 = \begin{vmatrix} \mathbf{i} & \mathbf{j} & \mathbf{k} \\ \frac{\partial X}{\partial u} & \frac{\partial Y}{\partial u} & 0 \\ \frac{\partial X}{\partial v} & \frac{\partial Y}{\partial v} & 0 \end{vmatrix}$$

The probability of getting k heads when flipping n coins is

$$P(E) = \binom{n}{k} p^k (1-p)^{n-k}$$

An Identity of Ramanujan

$$\frac{1}{\sqrt{1-\sqrt{5}}-\phi} e^{\frac{25}{\pi}} = 1 + \frac{e^{-2\pi}}{1 + \frac{e^{-4\pi}}{1 + \frac{e^{-6\pi}}{1 + \frac{e^{-8\pi}}{1 + \dots}}}}$$

A Rogers-Ramanujan Identity

$$1 + \frac{q^2}{(1-q)} + \frac{q^6}{(1-q)(1-q^2)} + \dots = \prod_{j=0}^{\infty} \frac{1}{(1-q^{5j+2})(1-q^{5j+3})}, \quad \text{for } |q|$$

Maxwell's Equations

$$\begin{aligned} \nabla \times \vec{\mathbf{B}} - \frac{1}{c} \frac{\partial \vec{\mathbf{E}}}{\partial t} &= \frac{4\pi}{c} \vec{\mathbf{j}} \\ \nabla \cdot \vec{\mathbf{E}} &= 4\pi \rho \\ \nabla \times \vec{\mathbf{E}} + \frac{1}{c} \frac{\partial \vec{\mathbf{B}}}{\partial t} &= \vec{\mathbf{0}} \\ \nabla \cdot \vec{\mathbf{B}} &= 0 \end{aligned}$$

Related links

- <https://groups.google.com/forum/?fromgroups=#!topic/mathjax-users/-AP8s7AVpLo>