

# Plugin Equation

Use this [wiki plugin](#), introduced in [Tiki2](#), to render an equation written in LaTeX syntax as an image. See also [MathJax](#).

## Prerequisites

# PHP

This plugin must have the php function EXEC enabled on the server for it to work.

# LaTex

LaTex distribution must be installed on your server. Check you have installed the following LaTex packages:

- `inputenc`
- `amsmath`
- `amsfonts`
- `amssymb`

• You should have a :

- `/usr/bin/latex`, `/usr/bin/dvips`, `/usr/bin/convert`, `/usr/bin/identify` and `/usr/bin/convert`
- If the path of these tasks are incorrect, you must adjust the php code in `lib/equation/class.latexrender.php`
- the directories `lib/equation/tmp/` and `lib/equation/pictures` must be writeable by the server.

The following directories need write permissions for the plugin to work:

`lib/equation/tmp`  
`lib/equation/pictures`



Since Tiki 20.x to view equations Tiki needs **the mathjax/mathjax package installed**.

# Parameters

Render an equation written in LaTeX syntax as an image

*Introduced in Tiki 2.*

[Go to the source code](#)

*Preferences required: wikiplugin\_equation*

## Parameters

*(body of plugin)* - equation

*no parameters*

# Examples

# Basic syntax

your latex formula

\$\$your latex formula\$\$

# With a famous equation

*This code,*

```
{EQUATION()}$$e=mc^2$${EQUATION}
```

*Would produce on this site:*

$\$e=mc^2\$$

# Another equation

*This code,*

```
{EQUATION()} \setlength{\unitlength}{1cm} \begin{picture}(4,2) \put(1,1){\circle{3}} \put(3,1){\circle*{5}} \end{picture}
```

{EQUATION}

*Would produce on this site:*

```
\setlength{\unitlength}{1cm} \begin{picture}(4,2) \put(1,1){\circle{3}} \put(3,1){\circle*{5}} \end{picture}
```

# Customizations

This plugin actually wraps a minimalistic LaTex around the formula. For instance, you can customize  
[lib/equation/class.latexrender.php](#) if you want other fonts.

```
\documentclass[12pt]{article} \usepackage[latin1]{inputenc} \usepackage{amsmath} \usepackage{amsfonts}  
\usepackage{amssymb} \pagestyle{empty} \begin{document} $your sexy formula$ \end{document}
```

# Related pages

- [MathJax](#)

# Aliases

- Latex