Yet Another Markdown Cheatsheet
Including MarkDown, MultiMarkdown, pandoc, GFM and LaTeX Math Syntax by MathJax

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Contents

1   Introduction

Examples (chapter 2) shows explicit examples for different syntaxes. Other Syntaxes (chapter 5) show the syntaxes that can't be shown explicitly.

1.1   Organization

- Header levels (except possibly the last header level): features in groups

- Last header level or a list: different syntaxes

- TaskPaper-styled tags to indicate in what favor of Markdown such syntax is supported

    - `@markdown`: supported by original markdown, hence understood to be supported by all variants of markdown

    - `@ghpages`: GitHub-Favored Markdown, built by kramdown with GFM option. i.e. GitHub Pages' GitHub-Favored Markdown (not exhaustively tested here. See kramdown's documentation[1] for other possible syntaxes)

    - `@mmd`: MultiMarkdown

    - `@pandoc`: pandoc-favored markdown

    - `@phpextra`: PHP Markdown Extra (inspired some syntax in pandoc and mmd and gfm, not exhaustively tested here)

- TaskPaper Tags

    - `@...(partial)`: partial supports only

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[1]http://kramdown.gettalong.org/syntax.html#tables

- `@...(+...)`: when the extension is used
- `@pandoc(--...)`: when the command line argument is used
- `@pandoc(parsed)`: not verbatim, but parsed

Note:

- You might see `<!-- \begin{comment} -->`...`<!-- \end{comment} -->`. This is for mmd to tex to pdf use only. Ignore this.

2 Examples

2.1 Header

@markdown
  See Emphasis (section 2.3) and Other Syntaxes (chapter 5) to see alternative Setext-style header styles @markdown

2.1.1 Header *Containing Styling* and a Link

@markdown

2.1.2 Header Containing Attributes {#identifier .class1 key=value1}

@pandoc @phpextra

2.1.3 Header Unnumbered {-}

@pandoc

2.1.4 Header Unnumbered 2 {.Unnumbered}

@pandoc

2.1.5 Auto Cross Reference

- Link to Header (section 2.1) @pandoc @ghpages @mmd
- Link to Header (section 2.1) @pandoc @mmd
- Header (section 2.1) @mmd @pandoc
- Header (section 2.1) @mmd @pandoc

2.1.6 User defined reference

- userdefinedreference (subsection 2.1.6) @mmd
- Link to userdefinedreference (subsection 2.1.6) @mmd @pandoc(+mmd_header_identifiers)
- Link to "Header Containing Attributes" (**??**) @pandoc
- another-link (**??**) @pandoc

2.1.7   Deeper Levels of Headers

2.1.7.1   Header4

2.1.7.1.1   Header5

2.1.7.1.1.1   Header6

2.2   Backslash Escapes

testing @markdown

2.3   Emphasis

- *italic* or *italic* @markdown

- **bold** or **bold** @markdown

- ***bold italic*** or ***bold italic*** @markdown

- ~~strikethrough~~ @pandoc

- Small caps @pandoc @markdown(html)

2.3.1   CriticMarkup

@mmd

Visually it looks like emphasis. Functionally it is much more, and called Critic Markup

- Deletions from the original text: This is is a test.

- Additions: This a test.

- Substitutions: This isn't a test.

- Highlighting: This is a test.

- Comments: This is a test.

See more at [CriticMarkup—MultiMarkdown Documentation](http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html)[2].

2.4   Horizontal Rules

@markdown

---

3 or more hyphens or asterisks

---

[2]http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html

2.5 Break

@markdown
  No break like this
  Soft break
like this
  Hard break
  like this

2.6 Superscript & Subscript

- x^2 @mmd

- d_o @mmd

- x^{a+b} @mmd @pandoc

- $x_{y,z}$ @mmd @pandoc

- P_a\ cat∼ @pandoc

2.7 Smarty Pants

@markdown(+smartypants) @pandoc(–smart) @ghpages

- "Example 1"

- 'Example 2'

- en–dash

- em—dash

- ellipsis. . .

@mmd

- "Example 3"

2.8 Abbreviations (PHP Markdown Extra)

@mmd @phpextra @pandoc(+abbreviations)
  Testing abbreviations: HyperText Markup Language (HTML), World Wide Web Consortium (W3C) (mouseover it to see)

2.9 Lists

2.9.1 Compact vs Loose Lists

The following effects are the same for different kind of lists @markdown

2.9.1.1 Compact

- test 1

- test 2

- test 3

2.9.1.2 Loose

- test 1

- test 2

- test 3

2.9.2 Ordered Lists

@markdown

1. test

2. test

3. test

2.9.3 Unordered Lists

@markdown

- test

- test

- test

2.9.4 Nested Lists

@markdown

- test

  - test

- test

  1. test
  2. test

     - test
       a) test
       b) test

  3. test

- test

Note about LaTeX output in mmd/pandoc:

- The Maximum nesting level of lists in LaTeX is 4. The quick hack is to mix itemize and enumerate alternatively to go beyond this.

2.9.5 Cutoff a List

@markdown

1. one

2. two

3. three

1. uno

2. dos

3. tres

- item one

- item two

end of list

```
{ my code block }
```

2.9.6 List Item in a Block

@markdown

- First paragraph.
  Continued.

- Second paragraph. With a code block, which must be indented eight spaces:

  ```
  { code }
  ```

2.9.7 Fancy Lists

@pandoc

3 . one

4 . two

9) Ninth 10) Tenth 11) Eleventh i. `i` ii. `ii` iii. `iii` (2) Two (5) Three 1. Four * Five

4.1 Definition Lists

4.1.1 Method 1

@mmd @phpextra @pandoc @ghpages

Physics The Fundamental of Science

Describe the Nature

Make Prediction

4.1.2 Method 2

@ghpages @pandoc @mmd

Term 1 Definition 1

Term 2 with *inline markup* Definition 2

```
{ some code, part of Definition 2 }
```

Third paragraph of definition 2.

4.2 Numbered Example Lists

@pandoc
(@) My first example will be numbered (1). (@) My second example will be numbered (2).
Explanation of examples.
(@) My third example will be numbered (3).
(@good) This is a good example.
As (@good) illustrates, . . .

4.3 Code

- `testing` @markdown

- `\[\ket{a}\]`{.latex} @pandoc

4.3.1 Fenced Code Blocks

4.3.1.1 Method 1

@markdown

```
test
test
    test
    # test
```

4.3.1.2   Method 2

@markdown(partial:language-not-supported) @ghpages @pandoc @mmd

$$\nabla \times \mathbf{E} = - \frac{\partial \mathbf{B}}{\partial t}$$

4.3.1.3   Method 3

@pandoc
~~~markdown test test test # test ~~~
~~~ {#mycode .markdown .numberLines startFrom="100"} test test test # test ~~~

4.4   Block-quotes

@markdown

4.4.0.1   Test

test

> test
> test

- test
- test

4.4.1   Block-quotes Quoting Codes

@markdown

```
\newcommand...
```

4.5   Line Blocks

@ghpages(partial) @pandoc
| The limerick packs laughs anatomical | In space that is quite economical. | But the good ones I've seen | So seldom are clean | And the clean ones so seldom are comical
| 200 Main St. | Berkeley, CA 94718

4.6   Tables

4.6.1   Method 1

@ghpages @pandoc @mmd

| **Right** | **Left** | **Default** | **Center** |

|——:|:——|————|:——:|

| **12** | **12** | **12** | **12** |

| **123** | **123** | **123** | **123** |

| **1** | **1** | **1** | **1** | Notice how pandoc can have optional caption like this

4.6.2 Method 2

@mmd

Table 1: Table Caption

Left align	Right align	Grouping Center align
This	This	This
column	column	column
will	will	will
be	be	be
left	right	center
aligned	aligned	aligned
And a big grouping is like this		

4.6.3 Method 3

@pandoc

Right Left Center Default ——- —— ———- —— 12 12 12 12 123 123 123 123 1 1 1 1
Table: Demonstration of simple table syntax.

4.6.4 Method 4

@pandoc

Centered Default Right Left Header Aligned Aligned Aligned ——————— ——- ——————
————————————- First row 12.0 Example of a row that spans multiple lines.
Second row 5.0 Here's another one. Note the blank line between

`rows.`

Table: Here's the caption. It, too, may span multiple lines.

4.6.5 Method 5

@pandoc Sample grid table.

+————+————+——————+ | Fruit | Price | Advantages | +===============+======
| Bananas | $1.34 | - built-in wrapper | | | | - bright color | +————+————+——
————+ | Oranges | $2.10 | - cures scurvy | | | | - tasty | +————+————+——
—————+

4.6.6   Method 6

@ghpages
  See [Syntax | kramdown](#)[3]

4.7   Links

- https://www.wikipedia.org @pandoc(+autolink_bare_uris)

- [https://www.wikipedia.org](#) @markdown

- [Wikipedia.org](#)[4] @markdown

- [Wikipedia.org](#)[5] @markdown

- [Mail to GitHub](#)[6] @markdown

4.7.1   Reference Links

- [Search here](#)[7] @markdown

- A [link](#)[8] with attributes. @mmd

- [Another link to the link above](#)[9]. @mmd

- A [link1](#)[10] with attributes. @markdown

- [Another link](#)[11]. @markdown

- [link3](#)[12]. @markdown

4.8   Footnotes

- Footnotes [13] @mmd

- Footnotes ^[This is a pandoc inline footnote] @pandoc

4.8.1   Reference Footnotes

- Footnotes[14] @markdown

- Long Footnotes [15] @pandoc @ghpages @mmd

This paragraph won't be part of the note, because it isn't indented.

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[3][http://kramdown.gettalong.org/syntax.html#tables](#)
[4][https://www.wikipedia.org](#)
[5][https://www.wikipedia.org](#)
[6][mailto:support@github.com](#)
[7][https://www.google.com](#)
[8][image.png](#)
[9][image.png](#)
[10][/foo/bar.html](#)
[11][http://fsf.org](#)
[12][/bar#special](#)
[13]This is a mmd inline footnote
[14]This is a footnote
[15]Here's one with multiple blocks.

4.8.2   Glossaries

A special kind of footnote . @mmd
See more at Glossary—MultiMarkdown Documentation[16].

4.8.3   Citations

It can looks like footnotes in HTML output.

4.8.3.1   MultiMarkdown

@mmd

- This is a statement that should be attributed to its source (1, p. 23).

See more at Citations—MultiMarkdown Documentation[17].

4.8.3.2   Pandoc

@pandoc
Very powerful but complicated. See more at Citations—Pandoc Documentation[18].

Subsequent paragraphs are indented to show that they belong to the previous footnote.

```
{ some.code }
```

The whole paragraph can be indented, or just the first line. In this way, multi-paragraph footnotes work like multi-paragraph list items.
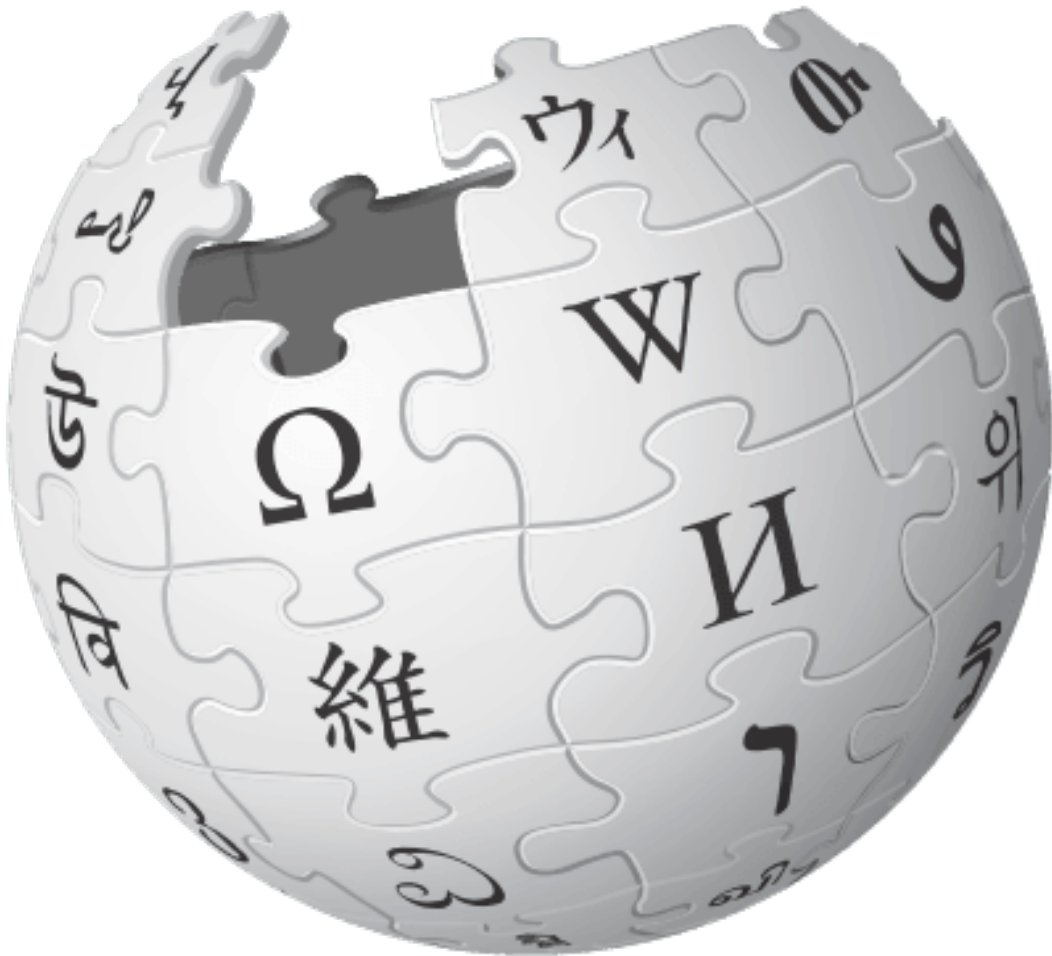
[16]http://fletcher.github.io/MultiMarkdown-5/glossary.html
[17]http://fletcher.github.io/MultiMarkdown-5/citations.html
[18]http://pandoc.org/README.html#citations

4.9   Images

- @markdown

4.9.1 Reference Images

-
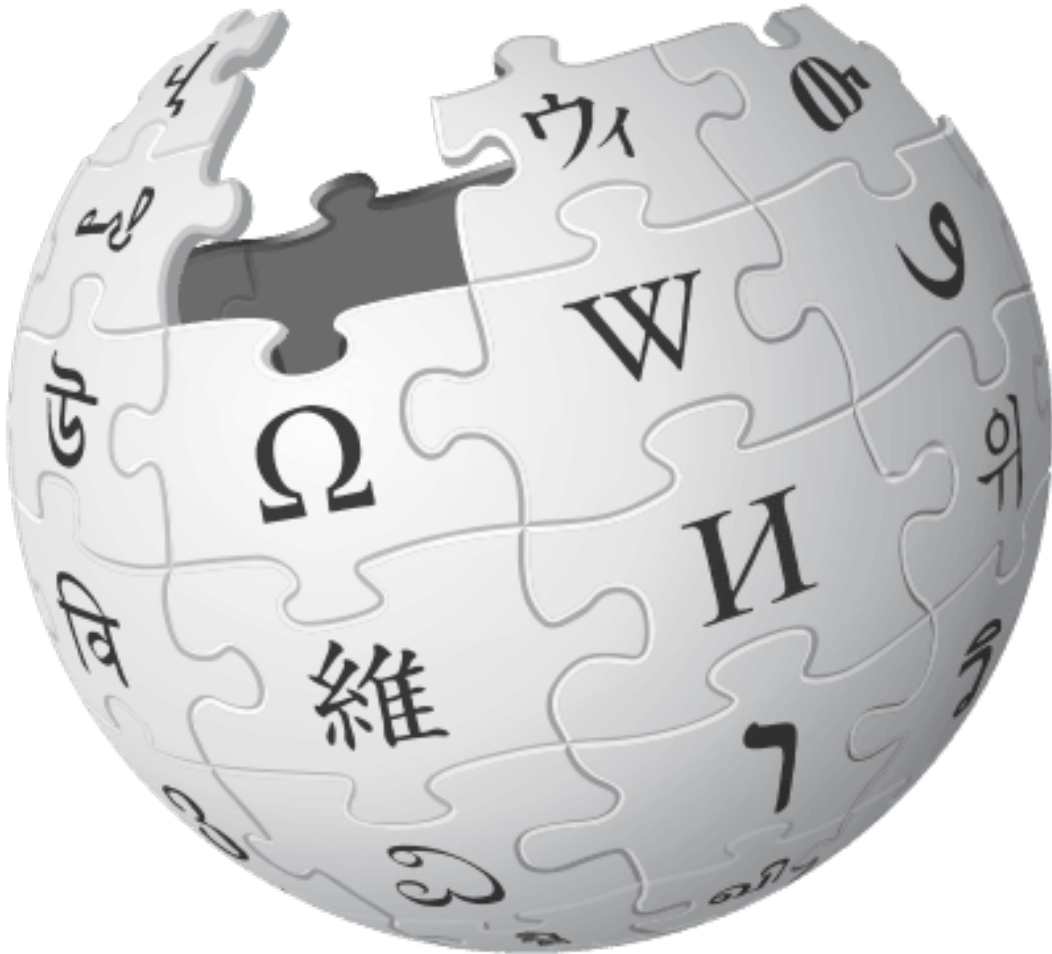 @markdown

- @mmd @pandoc(+mmd_link_attributes)

- {#id .class width=30 height=20px} @pandoc @phpextra(partial)

- a reference ![image][ref] with attributes. @pandoc @phpextra(partial)

[ref]: image.png "optional title" {#id .class key=val key2="val 2"}

4.9.2   Image with Links by Nesting Image and Link

- @markdown

4.9.3   Block Level Images

- Block level: HTML `figure` element in MultiMarkdown @mmd @pandoc

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[19]https://www.wikipedia.org/

Figure 1: **Block** Level

4.10 RAW

4.10.1 HTML

- This should *not* be markdown (or is it?) @markdown

- This *is* markdown @mmd @pandoc(+markdown_attribute)

See more at Raw—MultiMarkdown Documentation[20]. See test in [Babelmark 2 - Compare markdown implementations](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should

4.10.2 LaTeX

- @mmd

- \newcommand\rawlatex{} @pandoc(parsed)

- \begin{...} @pandoc

5 Other Syntaxes

5.1 Metadata

Note: mmd accepts capitalized metadata keys but others do not. For maximum compatibility, `author(s)`, `title`, etc. should be in lower cases.

5.1.1 MultiMarkdown Metadata Block

@mmd @pandoc(+mmd_title_block)

```
title:    A Sample MultiMarkdown Document
author:   Fletcher T. Penney
date:     February 9, 2011
comment:  This is a comment intended to demonstrate
          metadata that spans multiple lines, yet
          is treated as a single value.
CSS:      http://example.com/standard.css
```

See more at Metadata—MultiMarkdown Documentation[21].

5.1.2 Pandoc Title Block

@pandoc

```
% title
% author(s) (separated by semicolons)
% date
```

---

[20]http://fletcher.github.io/MultiMarkdown-5/raw.html
[21]http://fletcher.github.io/MultiMarkdown-5/metadata.html

5.1.3 YAML Metadata Block

@Mmd(partial)
  @pandoc @ghpages

```
---
title:    A Sample MultiMarkdown Document
author:   Fletcher T. Penney
date:     February 9, 2011
tags: [nothing, nothingness]
abstract: |
  This is the abstract.

  It consists of two paragraphs.
---
```

5.2 TOC

5.2.1 Pandoc

@pandoc
  Use `--toc` as a command argument.

5.2.2 MultiMarkdown

@mmd
  {{TOC}}, see beginning. It preprocess the headings and generate a ToC on its own, and doesn't give instruction for LaTeX to generate one. A hack is like this:

```
---
...
LaTeX Input:    mmd-load-toc-setcounter
LaTeX Input:    mmd-load-toc
...
---
<!-- \begin{comment} -->
{{TOC}}
<!-- \end{comment} -->
...
```

See more at [ickc/peg-multimarkdown-latex-support: Default support files for generating LaTeX documents with MMD 3 through MMD 5](https://github.com/ickc/peg-multimarkdown-latex-support)[22].

5.2.3 Kramdown

@ghpages

---

[22]https://github.com/ickc/peg-multimarkdown-latex-support

```
# Contents
{:.no_toc}

* Will be replaced with the ToC, excluding the "Contents" header
{:toc}
```

5.3 Math

MathJax is assumed. MathJax has many configurable options. See MathJax TeX and LaTeX Support — MathJax 2.6 documentation[23].

5.3.1 Markdown

@markdown
Add the following at the beginning of the document:

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

MathJax.js is used and any codes within math delimiters are treated as raw HTML and to be processed by MathJax.

MathJax delimiter are `$$...$$`, `\\(...\\)` and `\\[...\\]` (because an extra `\` can be used to escape from MarkDown).

Depending on the markdown parser, extra tricks might be needed to make sure nothing within the math delimiter is treated as markdown (see TeX and LaTeX in HTML documents — MathJax 2.6 documentation[24]). `$...$` can be used with MathJax configuration (see TeX and LaTeX math delimiters — MathJax 2.6 documentation[25]).

5.3.2 MultiMarkdown and Pandoc

There are subtleties how math should be used in HTML+MathJax and LaTeX output from single markdown source. See more in Testing LaTeX Environments Usage in MathJax From Markdown Conversion (including mmd and pandoc)[26].

5.3.2.1 MultiMarkdown

@mmd
Add the following metadata at the beginning of the document:

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

MultiMarkdown math delimiter are `$...$`, `$$...$$`, `\\(...\\)` and `\\[...\\]`.

---

[23]http://mathjax.readthedocs.org/en/latest/tex.html

[24]http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-in-html-documents

[25]http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-math-delimiters

[26]https://github.com/ickc/mathjax-latex-md-mmd-pandoc

5.3.2.2 Pandoc

@pandoc(–mathjax)

For pandoc, add `--mathjax` in the command-line argument.

Default math delimiter for pandoc is `$...$`, `$$...$$`. Other options are configurable. See more in Pandoc - Pandoc User's Guide[27].

5.3.3 Inline Math

- $1 + 1$

- $1 + 1$ @pandoc(+tex_math_double_backslash)

5.3.4 Block Math

-
$$RR^T = I$$

-
$$A_S^T = B$$

5.3.5 Other Examples

-
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

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

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

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

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

-
$$\frac{1}{\left(\sqrt{\phi\sqrt{5}} - \phi\right)e^{\frac{2}{5}\pi}} = 1 + \frac{e^{-2\pi}}{1 + \frac{e^{-4\pi}}{1 + \frac{e^{-6\pi}}{1 + \frac{e^{-8\pi}}{1+\ldots}}}}$$

- `$$ \begin{aligned} \nabla \times \vec{\mathbf{B}} -\, \frac1c\, \frac{\partial\vec{\mathbf{E}}}{\partial t} & = \frac{4\pi}{c}\vec{\mathbf{j}} \ \nabla \cdot \vec{\mathbf{E}} & = 4 \pi \rho \ \nabla \times \vec{\mathbf{E}}\, +\, \frac1c\, \frac{\partial\vec{\mathbf{B}}}{\partial t} & = \vec{\mathbf{0}} \ \nabla \cdot \vec{\mathbf{B}} & = 0 \end{aligned} $$`

---

[27]http://pandoc.org/README.html#non-pandoc-extensions

-

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

5.4 File Transclusion

@mmd

See more at File Transclusion—MultiMarkdown Documentation[28].

6 References

Some examples are directly or indirectly copied from the following documentations:

1. Pandoc - Pandoc User's Guide[29]

2. MultiMarkdown User's Guide[30]

3. Syntax | kramdown[31]

Bibliography

[1] John Doe. *Some Big Fancy Book*. Vanity Press, 2006.

[2] John Doe. *Another Big Fancy Book*. Vanity Press, 2016. 13

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[28]http://fletcher.github.io/MultiMarkdown-5/transclusion.html
[29]http://pandoc.org/README.html
[30]http://fletcher.github.io/MultiMarkdown-5/
[31]http://kramdown.gettalong.org/syntax.html#tables