

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

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## Part I

# Introduction

Examples ([Part II](#)) shows explicit examples for different syntaxes. Other Syntaxes ([Part V](#)) show the syntaxes that can't be shown explicitly.

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

Note:

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

## Part II

# Examples

## 2 Header

@markdown

See Emphasis ([chapter 4](#)) and Other Syntaxes ([Part V](#)) to see alternative Setext-style header styles @markdown

### 2.1 Header *Containing Styling* and a [Link](#)

@markdown

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

@pandoc @phpextra

### 2.3 Header Unnumbered {-}

@pandoc

### 2.4 Header Unnumbered 2 {.Unnumbered}

@pandoc

### 2.5 Auto Cross Reference

- Link to Header ([chapter 2](#)) @pandoc @ghpages @mmd
- Link to Header ([chapter 2](#)) @pandoc @mmd
- Header ([chapter 2](#)) @mmd @pandoc
- Header ([chapter 2](#)) @mmd @pandoc

### 2.6 User defined reference

- userdefinedreference ([section 2.6](#)) @mmd @pandoc(extension:mmd\_header\_identifiers)
- Link to “Header Containing Attributes” (??) @pandoc
- another-link (??) @pandoc

## 2.7 Deeper Levels of Headers

### 2.7.1 Header4

#### 2.7.1.1 Header5

##### 2.7.1.1.1 Header6 3 Backslash Escapes

\*testing\* @markdown

## 4 Emphasis

- *italic* or *italic* @markdown
- **bold** or **bold** @markdown
- ***bold italic*** or ***bold italic*** @markdown
- ~~strikethrough~~ @pandoc
- Small caps @pandoc @markdown(html)

### 4.1 CriticMarkup

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

See more at [CriticMarkup—MultiMarkdown Documentation<sup>1</sup>](http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html).

## 5 Horizontal Rules

@markdown

---

3 or more hyphens or asterisks

---

## 6 Break

@markdown

No break like this

Soft break

like this

Hard break

---

<sup>1</sup><http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html>



like this

## 7 Superscript & Subscript

- $x^2$  @mmd
- $d_o$  @mmd
- $x^{a+b}$  @mmd @pandoc
- $x_{y,z}$  @mmd @pandoc
- $P_a \setminus \text{cat} \sim$  @pandoc

## 8 Smarty Pants

@markdown(extension:smartypants) @pandoc(-smart) @ghpages

- “Example 1”
- ‘Example 2’
- “Example 3”
- en-dash
- em—dash
- ellipsis...

## 9 Abbreviations (PHP Markdown Extra)

@mmd @phpextra @pandoc(extension:abbreviations)

Testing abbreviations: HyperText Markup Language (HTML), World Wide Web Consortium (W3C) (mouseover it to see)

## 10 Lists

### 10.1 Ordered Lists

@markdown

1. test
2. test
3. test

## 10.2 Unordered Lists

@markdown

- test
- test
- test

## 10.3 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.

## 10.4 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 }
```

### 10.5 List Item in a Block

@markdown

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

```
{ code }
```

### 10.6 Fancy Lists

@pandoc

## Part III

### . one

## Part IV

### . two

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

## 11 Definition Lists

### 11.1 Method 1

@mmd @phpextra @pandoc @ghpages

**Physics** The Fundamental of Science

Describe the Nature

Make Prediction

### 11.2 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.

## 12 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, ...

## 13 Code

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

## 13.1 Fenced Code Blocks

### 13.1.1 Method 1

```
@markdown
test
test
    test
    # test
```

### 13.1.2 Method 2

```
@markdown(partial:language-not-supported) @ghpages @pandoc @mmd
\ nabla \ times \mathbf{E} = - \frac{\partial \mathbf{B}}{\partial t}
```

### 13.1.3 Method 3

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

## 14 Block-quotes

```
@markdown
```

### 14.0.1 Test

```
test

test
test

• test
• test
```

## 14.1 Block-quotes Quoting Codes

```
@markdown
\newcommand...
```

## 15 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

## 16 Tables

### 16.1 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

### 16.2 Method 2

@mmd

Table 1: Table Caption

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

### 16.3 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.

### 16.4 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.

## 16.5 Method 5

**@pandoc** Sample grid table.

	Fruit	Price	Advantages
Bananas	\$1.34	- built-in wrapper	- bright color
Oranges	\$2.10	- cures scurvy	- tasty

## 16.6 Method 6

@ghpages

See [Syntax | kramdown<sup>2</sup>](#)

## 17 Links

- `https://www.wikipedia.org @pandoc(extension:autolink_bare_uris)`
- `https://www.wikipedia.org @markdown`
- `Wikipedia.org3 @markdown`
- `Wikipedia.org4 @markdown`
- `Mail to GitHub5 @markdown`

## 17.1 Reference Links

- [Search here](#)<sup>6</sup> @markdown
- A [link](#)<sup>7</sup> with attributes. @mmd
- [Another link to the link above](#)<sup>8</sup>. @mmd
- A [link](#)<sup>9</sup> with attributes. @markdown

<sup>2</sup><http://kramdown.gettalong.org/syntax.html#tables>

<sup>3</sup><https://www.wikipedia.org>

<sup>4</sup><https://www.wikipedia.org>

<sup>5</sup><mailto:support@github.com>

<sup>6</sup><https://www.google.com>

<sup>7</sup>[image.png](#)

8 image.png

9 /foo/bar.html

- [Another link](#)<sup>10</sup>. @markdown
- [link3](#)<sup>11</sup>. @markdown

## 18 Footnotes

- Footnotes <sup>12</sup> @mmd
- Footnotes <sup>^[This is a pandoc inline footnote]</sup> @pandoc

### 18.1 Reference Footnotes

- Footnotes<sup>13</sup> @markdown
- Long Footnotes <sup>14</sup> @pandoc @ghpages @mmd

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

### 18.2 Glossaries

A special kind of footnote . @mmd

See more at [Glossary—MultiMarkdown Documentation](#)<sup>15</sup>.

### 18.3 Citations

It can look like footnotes in HTML output.

#### 18.3.1 MultiMarkdown

@mmd

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

See more at [Citations—MultiMarkdown Documentation](#)<sup>16</sup>.

---

<sup>10</sup><http://fsf.org>

<sup>11</sup>[/bar#special](#)

<sup>12</sup>This is a mmd inline footnote

<sup>13</sup>This is a footnote

<sup>14</sup>Here's one with multiple blocks.

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.

<sup>15</sup><http://fletcher.github.io/MultiMarkdown-5/glossary.html>

<sup>16</sup><http://fletcher.github.io/MultiMarkdown-5/citations.html>

### 18.3.2 Pandoc

@pandoc

Very powerful but complicated. See more at [Citations—Pandoc Documentation](http://pandoc.org/README.html#citations)<sup>17</sup>.

## 19 Images

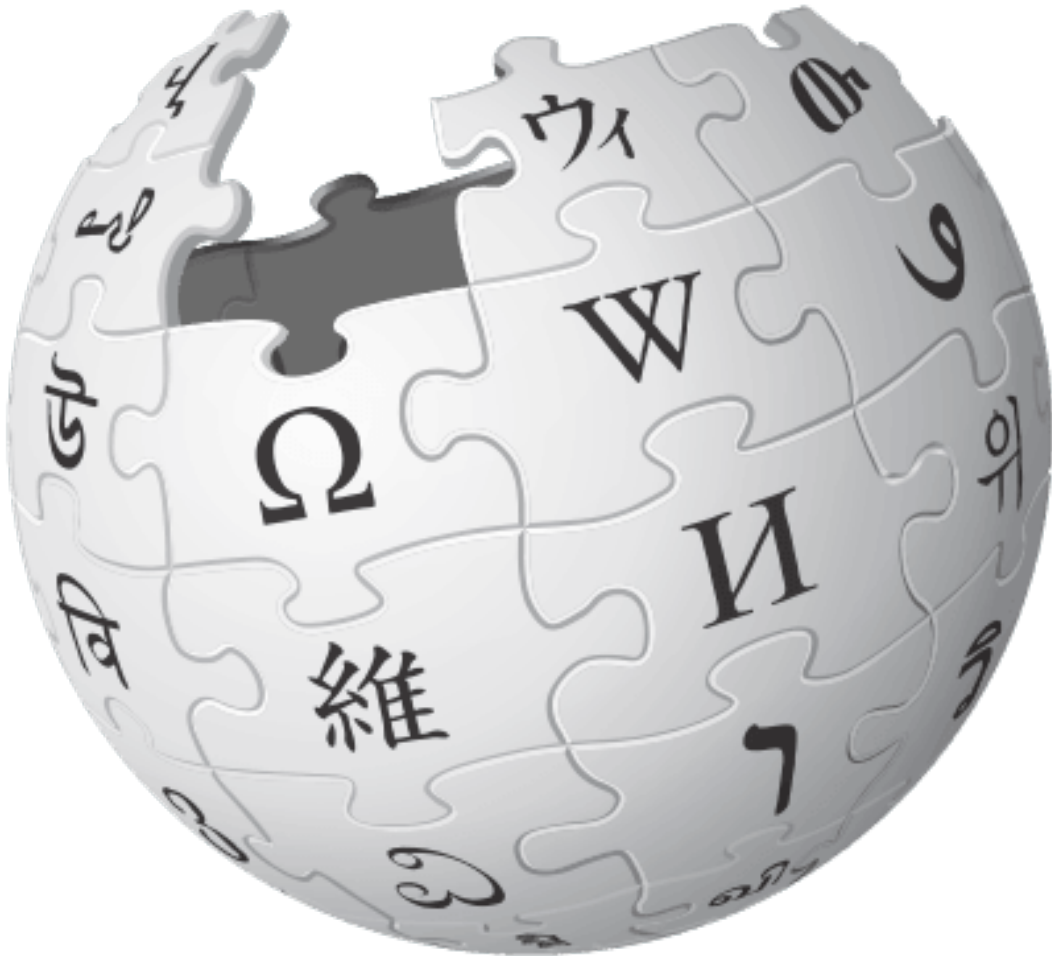


•  
@markdown

---

<sup>17</sup><http://pandoc.org/README.html#citations>

### 19.1 Reference Images



- @markdown



- @mmd @pandoc(extension:mmd\_link\_attributes)



- `.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”}

{#id

## 19.2 Image with Links by Nesting Image and Link



- @markdown

18

## 19.3 Block Level Images

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

---

<sup>18</sup><https://www.wikipedia.org/>

Figure 1: *Block Level*

- This *is* markdown @mmd @pandoc(non-default-extension:markdown\_attribute)

See more at [Raw—MultiMarkdown Documentation](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should)<sup>19</sup>. See test in [Babelmark 2 - Compare markdown implementations](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should).

## 20.2 LaTeX

- @mmd
- \newcommand\rawlatex{} @pandoc(parsed)
- \begin{...} @pandoc

---

<sup>19</sup><http://fletcher.github.io/MultiMarkdown-5/raw.html>



Part V

Other Syntaxes

## 21 Metadata

### 21.1 MultiMarkdown Metadata Block

```
@mmd @pandoc(extension: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](http://fletcher.github.io/MultiMarkdown-5/metadata.html)<sup>20</sup>.

### 21.2 Pandoc Title Block

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

### 21.3 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.
  ---
```

## 22 TOC

### 22.1 Pandoc

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

---

<sup>20</sup><http://fletcher.github.io/MultiMarkdown-5/metadata.html>

## 22.2 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](https://github.com/ickc/peg-multimarkdown-latex-support): Default support files for generating LaTeX documents with MMD 3 through MMD 5<sup>21</sup>.

## 22.3 Kramdown

@ghpages

```
# Contents
{:no_toc}

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

## 23 Math

MathJax is assumed. MathJax has many configurable options. See [MathJax TeX and LaTeX Support — MathJax 2.6 documentation](https://mathjax.readthedocs.org/en/latest/tex.html)<sup>22</sup>.

### 23.1 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_HTML"
</script>
```

<sup>21</sup><https://github.com/ickc/peg-multimarkdown-latex-support>

<sup>22</sup><http://mathjax.readthedocs.org/en/latest/tex.html>

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

MathJax delimiter are  $\$$. . . \$$ ,  $\backslash\left(\dots\right)$  and  $\backslash\left[\dots\right]$  (because an extra  $\backslash$  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](#)<sup>23</sup>).  $\$$. . . \$$  can be used with MathJax configuration (see [TeX and LaTeX math delimiters — MathJax 2.6 documentation](#)<sup>24</sup>).

## 23.2 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 \(including mmd and pandoc\)](#)<sup>25</sup>.

### 23.2.1 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_HTML-
                  </script>
```

MultiMarkdown math delimiter are  $\$$. . . \$$ ,  $\$$. . . \$$ ,  $\backslash\left(\dots\right)$  and  $\backslash\left[\dots\right]$ .

### 23.2.2 Pandoc

@pandoc

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](#)<sup>26</sup>.

## 23.3 Inline Math

- $1 + 1$
- $1 + 1$

## 23.4 Block Math

- $$RR^T = I$$
- $$A_S^T = B$$

<sup>23</sup><http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-in-html-documents>

<sup>24</sup><http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-math-delimiters>

<sup>25</sup><https://github.com/ickc/mathjax-latex-md-mmd-pandoc>

<sup>26</sup><http://pandoc.org/README.html#non-pandoc-extensions>

### 23.5 Other Examples

•

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

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

•

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

•

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

•

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

•

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

• 
$$\begin{aligned} \nabla \times \vec{\mathbf{B}} &= \frac{1}{c} \nabla \left( \frac{\partial \mathbf{E}}{\partial t} \right) \\ \nabla \cdot \vec{\mathbf{E}} &= \frac{4\pi}{c} \rho \\ \nabla \times \vec{\mathbf{E}} &= -\frac{1}{c} \frac{\partial \mathbf{B}}{\partial t} \\ \nabla \cdot \vec{\mathbf{B}} &= 0 \end{aligned}$$

•

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

## 24 File Transclusion

@mmd

See more at [File Transclusion—MultiMarkdown Documentation](http://fletcher.github.io/MultiMarkdown-5/transclusion.html)<sup>27</sup>.

<sup>27</sup><http://fletcher.github.io/MultiMarkdown-5/transclusion.html>

Part VI

References

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

1. [Pandoc - Pandoc User's Guide](#)<sup>28</sup>
2. [MultiMarkdown User's Guide](#)<sup>29</sup>
3. [Syntax | kramdown](#)<sup>30</sup>

## Bibliography

- [1] John Doe. *Some Big Fancy Book*. Vanity Press, 2006.
- [2] John Doe. *Another Big Fancy Book*. Vanity Press, 2016. [18](#)

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<sup>28</sup><http://pandoc.org/README.html>

<sup>29</sup><http://fletcher.github.io/MultiMarkdown-5/>

<sup>30</sup><http://kramdown.gettalong.org/syntax.html#tables>