

# Yet Another Markdown Cheatsheet

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# 1 Contents

`{:.no_toc}`

- Will be replaced with the ToC, excluding the “Contents” header `{:toc}`

`{{TOC}}`

# 2 Introduction

**Examples** shows explicit examples for different syntaxes. **Other Syntaxes** show the syntaxes that can’t be shown explicitly.

## 2.1 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)
- TaskPaper Tags
  - `@...(partial)`: partial supports only
  - `@...(+...)`: 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.

## 3 Examples

### 3.1 Header

@markdown

See [Emphasis](#) and [Other Syntaxes](#) to see alternative Setext-style header styles

@markdown

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

@markdown

#### 3.1.2 Header Containing Attributes

@pandoc @phpextra

#### Header Unnumbered

@pandoc

#### 3.1.3 Header Unnumbered 2

@pandoc

#### 3.1.4 Auto Cross Reference

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

#### 3.1.5 User defined reference

- `[userdefinedreference]` @mmd
- [Link to userdefinedreference](#) @mmd @pandoc(+mmd\_header\_identifiers)
- [Link to “Header Containing Attributes”](#) @pandoc
- [another-link](#) @pandoc

### 3.1.6 Deeper Levels of Headers

#### 3.1.6.1 Header4

##### 3.1.6.1.1 Header5

Header6

## 3.2 Backslash Escapes

\*testing\* @markdown

## 3.3 Emphasis

- *italic* or *italic* @markdown
- **bold** or **bold** @markdown
- ***bold italic*** or ***bold italic*** @markdown
- ~~strikethrough~~ @pandoc
- SMALL CAPS @pandoc @markdown(html)

### 3.3.1 CriticMarkup

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

- Deletions from the original text: This is {-is -}a test.
- Additions: This {++is ++}a test.
- Substitutions: This {isn't>is~} a test.
- Highlighting: This is a {==test==}.
- Comments: This is a test{>>What is it a test of?<<}.

See more at [CriticMarkup—MultiMarkdown Documentation](#).

## 3.4 Horizontal Rules

@markdown

3 or more hyphens or asterisks

### 3.5 Break

@markdown

No break like this

Soft break  
like this

Hard break  
like this

### 3.6 Superscript & Subscript

- $x^2$  @mmd
- $d \sim o$  @mmd
- $x^{a+b}$  @mmd @pandoc
- $x_{y,z}$  @mmd @pandoc
- $P_{a \text{ cat}}$  @pandoc

### 3.7 Smarty Pants

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

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

@mmd

- “Example 3”

### 3.8 Abbreviations (PHP Markdown Extra)

@mmd @phpextra @pandoc(+abbreviations)

Testing abbreviations: HTML, W3C (mouseover it to see)

### 3.9 Lists

#### 3.9.1 Ordered Lists

@markdown

1. test
2. test
3. test

### 3.9.2 Unordered Lists

@markdown

- test
- test
- test

### 3.9.3 Nested Lists

@markdown

- test
  - test
- test
  1. test
  2. test
    - test
      1. test
      2. 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.

### 3.9.4 Cutoff a List

@markdown

1. one
  2. two
  3. three
- 
1. uno
  2. dos
  3. tres
- 
- item one
  - item two

```
{ my code block }
```

### 3.9.5 List Item in a Block

@markdown

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

```
{ code }
```

### 3.9.6 Fancy Lists

@pandoc

1. one
2. two
- 9) Ninth
- 10) Tenth
- 11) Eleventh
  - i. i
  - ii. ii
  - iii. iii
- (2) Two
- (3) Three
1. Four
- Five

## 3.10 Definition Lists

### 3.10.1 Method 1

@mmd @phpextra @pandoc @ghpages

**Physics** The Fundamental of Science  
Describe the Nature  
Make Prediction



### 3.10.2 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.

## 3.11 Numbered Example Lists

@pandoc

- (1) My first example will be numbered (1).
- (2) My second example will be numbered (2).

Explanation of examples.

- (3) My third example will be numbered (3).
- (4) This is a good example.

As (4) illustrates, ...

## 3.12 Code

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

### 3.12.1 Fenced Code Blocks

#### 3.12.1.1 Method 1

@markdown

```
test
test
    test
    # test
```

#### 3.12.1.2 Method 2

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

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

### 3.12.1.3 Method 3

```
@pandoc

test
test
    test
    # test
100 test
101 test
102     test
103     # test
```

## 3.13 Block-quotes

@markdown

### 3.13.0.1 Test

```
test
    test
    test
    • test
    • test
```

### 3.13.1 Block-quotes Quoting Codes

@markdown

```
\newcommand...
```

## 3.14 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

### 3.15 Tables

#### 3.15.1 Method 1

@ghpages @pandoc @mmd

Table 1: Notice how pandoc can have optional caption like this

Right	Left	Default	Center
12	12	12	12
123	123	123	123
1	1	1	1

#### 3.15.2 Method 2

@mmd

[Table Caption] || Grouping || | Left align | Right align | 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 |||

#### 3.15.3 Method 3

@pandoc

Table 2: Demonstration of simple table syntax.

Right	Left	Center	Default
12	12	12	12
123	123	123	123
1	1	1	1

#### 3.15.4 Method 4

@pandoc



## 3.16 Links

- <https://www.wikipedia.org> @pandoc(+autolink\_bare\_uris)
- <https://www.wikipedia.org> @markdown
- [Wikipedia.org](#) @markdown
- [Wikipedia.org](#) @markdown
- [Mail to GitHub](#) @markdown

### 3.16.1 Reference Links

- [Search here](#) @markdown
- A [link](#) with attributes. @mmd
- [Another link to the link above.](#) @mmd
- A [link1](#) with attributes. @markdown
- [Another link.](#) @markdown
- [link3.](#) @markdown

## 3.17 Footnotes

- Footnotes [<sup>^</sup>This is a mmd inline footnote] @mmd
- Footnotes <sup>1</sup> @pandoc

### 3.17.1 Reference Footnotes

- Footnotes<sup>2</sup> @markdown
- Long Footnotes <sup>3</sup> @pandoc @ghpages @mmd

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

### 3.17.2 Glossaries

A special kind of footnote <sup>4</sup>. @mmd

See more at [Glossary—MultiMarkdown Documentation](#).

---

<sup>1</sup>This is a pandoc inline footnote

<sup>2</sup>This is a footnote

<sup>3</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>4</sup>glossary: term (optional sort key) The actual definition belongs on a new line, and can continue on just as other footnotes. Note how it fallbacks gracefully in Markdown.

### 3.17.3 Citations

It can look like footnotes in HTML output.

#### 3.17.3.1 MultiMarkdown

@mmd

- This is a statement that should be attributed to its source [p. 23](#).

[Not cited](#)

See more at [Citations—MultiMarkdown Documentation](#).

#### 3.17.3.2 Pandoc

@pandoc

Very powerful but complicated. See more at [Citations—Pandoc Documentation](#).

## 3.18 Images




•

@markdown

### 3.18.1 Reference Images



- @markdown
-  @mmd @pandoc(+mmd\_link\_attributes)
-  @pandoc @phpextra(partial)



- a reference with attributes. @pandoc @phpextra(partial)



### 3.18.2 Image with Links by Nesting Image and Link



- @markdown

### 3.18.3 Block Level Images

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



Figure 1: *Block Level*



## RAW ##

#### 3.18.4 HTML

- This should *not* be markdown (or is it?)  
@markdown
- This *is* markdown  
@mmd @pandoc(+markdown\_attribute)

See more at [Raw—MultiMarkdown Documentation](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should+*not*+be+markdown+(or+is+it%3F%29+%3C%2Fdiv%3E%0A%3Cdiv+markdown%3D1%3EThis+*is*+markdown%3C%2Fdiv%3E)). See test in [Babelmark 2 - Compare markdown implementations]([http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should+\\*not\\*+be+markdown+\(or+is+it%3F%29+%3C%2Fdiv%3E%0A%3Cdiv+markdown%3D1%3EThis+\\*is\\*+markdown%3C%2Fdiv%3E\)](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should+*not*+be+markdown+(or+is+it%3F%29+%3C%2Fdiv%3E%0A%3Cdiv+markdown%3D1%3EThis+*is*+markdown%3C%2Fdiv%3E))).

### 3.18.5 LaTeX

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

## 4 Other Syntaxes

### 4.1 Metadata

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

#### 4.1.1 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](#).

#### 4.1.2 Pandoc Title Block

@pandoc

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

#### 4.1.3 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.
---

```

## 4.2 TOC

### 4.2.1 Pandoc

@pandoc

Use `--toc` as a command argument.

### 4.2.2 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](http://ickc/peg-multimarkdown-latex-support): Default support files for generating LaTeX documents with MMD 3 through MMD 5.

### 4.2.3 Kramdown

@ghpages

```

# Contents
{:.no_toc}

```

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

## 4.3 Math

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

### 4.3.1 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-full">
</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  $\\$\\dots\\$\\$, \\(\\dots\\)$  and  $\\[\\dots\\]$  (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](#)).  $\\dots$  can be used with MathJax configuration (see [TeX and LaTeX math delimiters — MathJax 2.6 documentation](#)).

### 4.3.2 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 \(including mmd and pandoc\)](#).

#### 4.3.2.1 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-full">
</script>
```

MultiMarkdown math delimiters are  $\$ \dots \$$ ,  $\$\$ \dots \$\$$ ,  $\backslash(\dots \backslash)$  and  $\backslash[\dots \backslash]$ .

#### 4.3.2.2 Pandoc

@pandoc(-mathjax)

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

Default math delimiter for pandoc is  $\$ \dots \$$ ,  $\$\$ \dots \$\$$ . Other options are configurable. See more in [Pandoc - Pandoc User's Guide](#).

#### 4.3.3 Inline Math

- $1 + 1$
- $1 + 1$  @pandoc(+tex\_math\_double\_backslash)

#### 4.3.4 Block Math

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

#### 4.3.5 Other Examples

- $$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$
- $$\begin{aligned}\dot{x} &= \sigma(y - x) \\ \dot{y} &= \rho x - y - xz \\ \dot{z} &= -\beta z + xy\end{aligned}$$
- $$\left(\sum_{k=1}^n a_k b_k\right)^2 \leq \left(\sum_{k=1}^n a_k^2\right) \left(\sum_{k=1}^n b_k^2\right)$$
- $$\mathbf{V}_1 \times \mathbf{V}_2 = \begin{vmatrix} \mathbf{i} & \mathbf{j} & \mathbf{k} \\ \frac{\partial X}{\partial u} & \frac{\partial Y}{\partial u} & 0 \\ \frac{\partial X}{\partial v} & \frac{\partial Y}{\partial v} & 0 \end{vmatrix}$$
- $$P(E) = \binom{n}{k} p^k (1-p)^{n-k}$$

•

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

•

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

•

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

# 4.4 File Transclusion

@mmd

See more at [File Transclusion—MultiMarkdown Documentation](#).

# 5 References

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

1. [Pandoc - Pandoc User's Guide](#)
2. [MultiMarkdown User's Guide](#)
3. [Syntax | kramdown](#)