

CONVENTIONS

general conventions

LaTeX

LaTeX is used for all mathematical equations through my custom math notation

variables are defined in separate lines using a *, where* statement

whitespace in formulas follow programming-language-like conventions

international system of units units and other units are to be written using `\text{}`

the `:` operator must always be surrounded one space on either side, or written as the first character of an equation as `\ : \`

the \rightarrow operator is written as `\to` by default, and must be written as `\rightarrow` when it indicates a math notation function definition

`\R`, `\N`, `\Z`, `\{` and `\}` must not be used, as they are not widely supported. `\mathbb R`, `\mathbb N`, `\mathbb Z`, `\lbrace` and `\rbrace` should be used instead, respectively.

`\` must be replaced by `\\` for them to work properly. see the following discussion:

<https://github.com/mathjax/MathJax/issues/1301>

when `$` do not parse properly, add a `.` when necessary. for example, write `_this is \top` as `_this is \top.`

more information about supported features available at:

<https://katex.org/docs/supported.html>

headings

capitalized headings are for concepts

lowercase headings are for general titles

the following headings are commonly used:

- **definition**
- **notation**

- **representation**
- **types**
- **applications**
- **example**
- **counterexample**
- **theorems**
- **definitions**
- **properties**
- **procedure**
- **pros & cons**
- **see**

headers still in new:

- **types**
- **examples** (#todo rename, should represent "children" and not examples)

blockquotes added in new:

- **usage**
- **constant**
- **representation**
- **types**

-
- procedure
 - notes
 - example
 - proof
 - mnemonic

- theorem
- definition
- types
- properties
- applications
- pros
- cons

- pros & cons
- representation

quotes, italics, bold, sources, URLs

blockquotes are used for factual information and definitions

italics are used for tricks and personal definitions and to replace quotation marks. bold is used for emphasis. italics must not be used for emphasis and quotation marks are to be avoided

— ... statements are used for citing sources

all external URLs are denoted using <...> statements

note system

wiki links are generally avoided in headings

a page can link to itself

see ... statements are for prerequisites

note names are mostly *-ing* verbal groups or singular nominal groups, and sometimes adjectives when necessary

line breaks are used exclusively for how they look in the render and never to make the source code more readable (which is why almost no single line breaks are used)

horizontal rules are occasionally used to separate a whole file in different sections

each page has one title case first-level heading, which must correspond to the file name. occasional subsequent first-level headings must be preceded by a horizontal rule

in file names, spaces are replaced by dashes and apostrophes and diacritics are removed

box titles are generated with <https://lingo.jam.com/BoldTextGenerator>

all internal links are denoted using note and



, and all external links are denoted using <https://example.com/>

note, theorem, proof, definition

all constructs below can be multiline

note: this is a note to clarify the previous statement

theorem: this is a theorem — this is an optional source

theorem: *theorem name*

this is a theorem — this is an optional source

proof: this is a proof of the above theorem — this is an optional source

proof: — this is a source

definition: *term* is a term that is defined here — this is an optional source

AKA: this is a list of synonyms for a concept, "also known as"

syntax used

h1

h2

h3

italics

bold

inline code

```
// code block
console.log(() => 'Fira Code Ligatures');
```

- unordered
- list

1. ordered

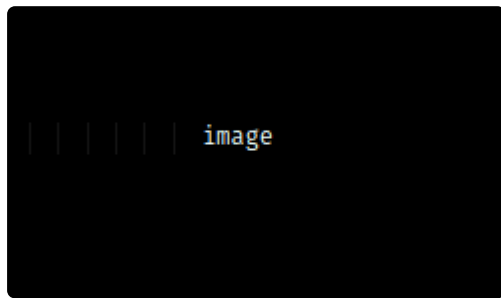
2. list

$LaTeX$

#tag

wiki link

<https://example.com/>



| blockquote

table

1

2

3

unused syntax

Block LAT_{EX}

emojis



- ☐ task
- ☒ list

horizontal rule

PDF export conventions

see matrix for an example application of report-style PDF export conventions

the following scripts are to be appended to any page before it is exported

```
<script type="text/javascript" id="MathJax-script" async src="https://cdn.jsdelivr.net/npm
```

report-style PDF export conventions

see [eng1112 report 2](#) for an example application of report-style PDF export conventions

the following stylesheet is to be appended to any report-style document

```
<style> p { text-indent: 40px; } blockquote > p { text-indent: 0; } hr { opacity: 0; page
```

syntax used

horizontal rules act as page breaks

paragraphs have their first line indented — lorem ipsum dolor sit amet, consectetur adipiscing elit. sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

citations have all but their first line indented — lorem ipsum dolor sit amet, consectetur adipiscing elit. sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

unused syntax

Theorem 1. *This is a theorem.*

Lemma 2. *This is a lemma.*

Definition 1. This is a definition.

Proof. This is a proof. ■

presentation-style note conventions

see [vim talk](#) and [carbon language talk](#) for example applications of presentation-style note conventions

presentation-style notes are viewed using Obsidian's *Start presentation* feature

slides are separated by using horizontal rules, ---

headings and content can optionally be separated using an HTML line break,

personal comments and notes are to be written between <? and ?> tags, and not between <!-- and --> tags

level-3 headings are not used as they look too similar to level-2 headings on Obsidian. there can be multiple level-1 headings in one presentation