# 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

<u>Si</u> units and other units are to be written using \text{}

the : <u>Operator</u> 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  $\setminus$ to by default, and must be written as  $\setminus$ rightarrow when it indicates a <u>Math Notation Function</u> 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

more information about supported features available at: <a href="https://katex.org/docs/supported.html">https://katex.org/docs/supported.html</a>

### headings

capitalized headings are for Concepts

lowercease headings are for general titles

the following headings are commonly used:

- definition, definitions
- notation
- representation
- types
- applications
- example, examples

- counterexample, counterexamples
- theorems
- properties
- procedure
- see

### quotes, italics, bold, sources, URLs

blockquotes are used for <u>Factual</u> 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 all -ing verbal groups or singular nominal groups

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 <u>Dash</u>es and apostrophes and diacritics are removed

box titles are generated with <a href="https://lingojam.com/BoldTextGenerator">https://lingojam.com/BoldTextGenerator</a>

### 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

```
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

 $\mathbf{bold}$ 

inline code

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

- unordered
- list
- 1. ordered
- 2. list

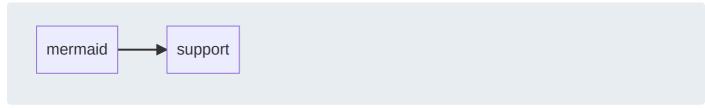
 $LAT_{E}X$ 

#tag

Wiki Link

https://example.com/





blockquote

#### table

1

2

3

## unused syntax

Block  $\angle TEX$ 

emojis



- $\Box$  task
- 🗹 list

horizontal rule

## PDF export conventions

see  $\underline{\operatorname{Eng}}$  1112  $\underline{\operatorname{Report}}$  2 for an example application of the conventions outlined below

### syntax used

page break

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### 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.

**note**: the elements above are not used in my <u>Conceptual Notes</u> as they are not natively supported in Markdown. this "quote with bold text" format is used instead

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### LaTeX & Wiki Link Support

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