# A Nice Title

## Me, Myself, and I

Last Updated: July 27, 2020

1	Wel	come	2
	1.1	On Colorful Boxes	2
	1.2	On Cross-Referencing	4
	1.3	On Math	4

### WELCOME

This is a quote from someone

— Author, Optional Source

H ELLO THERE, and welcome to A Topic. This is literally just an example with random content that demonstrates how the template will look when used in book form.

#### 1.1 On Colorful Boxes

There are lots of different boxes you can make:

• Like this one,

which is wrapped in gray. I use it for notes....

• Or this one,

which is wrapped in red. I use it for fun facts or other asides...

• Or this one,

which is wrapped in blue and used for mathy stuff.

• Or this last one,

which is wrapped in green. With a title, it's used for enumerated examples (see \extitle and \excounter). Observe:

#### EXAMPLE 1.1: **Test**

This is an example. What's the answer to 2 + 2?

ANSWER: Obviously 4, lol.

#### EXAMPLE 1.2: Test Again

This one will increment the counter automatically, resetting for each chapter.

• For red and blue boxes, there are custom commands for titles, too:

#### ONE TITLE

Like this

#### Two Titles: A Subtitle

Or this

These styles also automatically apply to theorems and claims.

**Theorem 1.1** (Pythagorean Theorem). For any right triangle with legs a, b and hypotenuse c:

$$a^2 + b^2 = c^2 (1.1)$$

*Proof.* This is left as an exercise to the reader.

Claim 1.1. This is the greatest note template in the world.

There are different ways to quote things, too, depending on how you want to emphasize:

This is a simple, indented quote with small letters and italics usually suitable for in-text quotations when you just want a block.

An Author

Alternatively, you can use the \inspiration command from the chapter heading, which leverages the thickleftborder frame internally, but adds a little more padding and styling (there's also just leftborder for a thinner variant):

Hello there!

### 1.2 On Cross-Referencing

This is the standard way to include margin notes. There are also commands to link to source papers directly (see \lesson).

You can reference most things—see Theorem 1.1 or (1.1) or the Welcome chapter—directly and easily as long as you give them labels. These are "built-ins." However, you can also create a **custom term** that will be included in the index, then include references to it that link back to the original definition. Try clicking: custom term. Building the index is on you, though. You can also reference by using a different term for the text: like this. Sometimes it doesn't fit the **grammatical structure** of the sentence so you can define the term one way and visualize it another way (this creates a **grammar** entry in the index). There's also **math terms** and a way to reference them: math terms (clickable), but they do **not** show up in the index.

#### 1.3 On Math

Most of the math stuff is just macros for specific things like the convolution operator,  $\circledast$ , probabilities,  $\Pr[A | B = C]$ , or big-O notation,  $\mathcal{O}(n^2 \log n)$  but there's also a convenient way to include explanations on the side of an equation:

$$1+1\stackrel{?}{=}2$$
 first we do this  $2\stackrel{?}{=}2$  then we do this  $2=2$ 

These are all in the CustomCommands.sty file.

An Author 4