



Senior Thesis in Mathematics

Absolutely Fascinating Thesis Title

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Abstract

In this paper we don't really do much. However, there are a lot of *real* theorems that still need to be proved. That is what you will probably do in your thesis.

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Chapter 1

Boring Title for the First Chapter

Let us do some math:

$$(h) = h_{(1)} \quad h_{(2)}$$

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Here is how you declare a theorem:

Theorem 1.1 *A Big Fat Theorem. We assert that the following is true:*

$$(x = 1; y = 1) \quad x + y = 2 \tag{1.1}$$

Let us first consider:

Lemma 1.2 *A Small but Important Lemma. If $x = a$, and $y = b$, then $x + y = a + b$.*

We can then see that Lemma 1.2 implies Theorem 1.1 by letting $a = 1$ and $b = 1$ in Equation (1.1). See how we refer to a previously labeled item in the text?

1.1 A delightful new section

Some text for the section should go here. And let us look at footnotes.^{1 2}

¹This is one way to use a footnote.

²Here is a second way to introduce a footnote

Theorem 1.3 *hmmm*

Here is how you call the proof environment:

Proof hmmm



Chapter 2

Cooler Title for the Second Chapter

As we saw in Chapter 1, everything can be made to be complicated. (See, for example, Figure 2.1.) This is usually not a good idea unless you want to lose your audience.

Most importantly, **NEVER DIVIDE BY ZERO** unless, of course, you are wearing your protective divide-by-zero suit (See [Abe, 1980] for the terrible consequences which might result. And this is how you cite multiple references: [Abe, 1980, Blohmann et al., 2007, Böhm, 2005a]. And if you wanted to, you could refer to specific pages: [Böhm, 2005b, pages 567{569}).

2.1 Another fascinating section

Some text needs to go here.

2.1.1 And sometimes you will need subsections...

More text goes here.

Figure 2.1: Graphics can really snaz it up!

Bibliography

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