

#### Senior Thesis in Mathematics

## Absolutely Fascinating Thesis Title

Author: Advisor: Firstname Lastname Dr. Firstname Lastname

Submitted to Pomona College in Partial Fulfillment of the Degree of Bachelor of Arts

January 20, 2015

#### 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.

## Contents

1	Boring Title for the First Chapter	1
	1.1 A delightful new section	1
2	Cooler Title for the	

## Chapter 1

# Boring Title for the First Chapter

Let us do some math:

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

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

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

Here is how you declare a theorem:

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

$$X = 1; y = 1$$
)  $X + y = 2$  (1.1)

Let us first consider:

Lemma 1.2 A Small but Important Lemma. If x = a, and y = b, then x + y = a + f(x) If x = a, and y = b, then

× +

Let us first

#### Theorem 1.3 hmmm

Here is how you call the proof environment:

Proof hmmmm

### 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 [1] for the terrible consequences which might result. And this is how you cite multiple references: [1, 2, 3]. And if you wanted to, you could refer to specific pages: [4, 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.

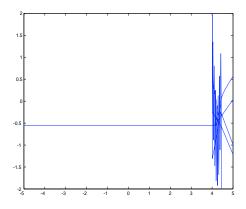


Figure 2.1: Graphics can really

snaEQ0.9791\_1 1 Tup!

### Bibliography

- [1] Abe, Eiichi; Hopf algebras, Cambridge Tracts in Mathematics, 74, Cambridge University Press, Cambridge-New York, 1980.
- [2] Blohmann, Christian; Tang, Xiang; Weinstein, Alan; \Hopfish structures and modules over irrational rotation algebras", e-arXiv preprint, arXiv:math.QA/0604405
- [3] Böhm, Gabriella; \An alternative notion of Hopf algebroid", Hopf algebras in noncommutative geometry and physics, Lecture Notes in Pure and Appl. Math. 239, Dekker, New York, 2005, pp.31{53.
- [4] Böhm, Gabriella; \Integral theory for Hopf algebroids", Algebr. Represent. Theory 8 (2005), no. 4, pp.563{599.