1. Read the course webpage: http://web.stanford.edu/~jchw/2015Math110 and familiarize yourself with the course policy and the available resources.

If you have questions or find any errors, contact Jenny at jchw@stanford.edu.

Students who have conflicts with any of our exams should inform Jenny as soon as possible, well in advance of the test. Students in need of accommodations for a disability should contact the OAE as soon as possible to obtain the necessary documentation, and contact Jenny as soon as they can.

- 2. Obtain a non-programmable, non-scientific calculator, ideally within the next week. The calculator should have only basic arithmetic functions $(+, -, \times, \div, \text{possibly } \sqrt{})$. Such calculators can be ordered inexpensively online or through the campus bookstore: goo.gl/udzhRR.
- 3. As an alternative reference for some of the topics in this course, download Stein's book "Elementary Number Theory: Primes, Congruences, and Secrets". The book is available freely (and legally!) here: http://wstein.org/books/ent/.
- 4. Take a look at the handout "Primer on Proof", http://web.stanford.edu/~jchw/PrimerOnProof-Math110. pdf. This handout is optional reading, however it is strongly recommended for students with less theoretical math background to read it, over the next week or so. Students will not be tested directly on the content of the handout, but are expected to become familiar with the mathematical conventions and tenets of proof-writing it describes. You are encouraged to bring questions in to office hours, and hand in some or all of the exercises at the end of the handout to Jenny for feedback.
- 5. These instructions are for students who are new to Latex. Those who already have Latex installed should skip ahead to step (b). Those who are already fluent with Latex should go directly to step (d), and should be able to complete this question quickly.
 - (a) Install Latex on your computer, if you have not already done so. This involves installing both a TeX distribution and an editor. There are installation instructions available on our course webpage at: http://web.stanford.edu/~jchw/2015Math110#Latex. There are also a number of tutorials and video tutorials available online to guide you through the installation process.

Trouble installing Latex? Don't panic. Do make an effort to get it working, but we understand that you may run into difficulty. Be prepared to come in to office hours or seek help from a classmate. We hope everyone will have the software running by Thursday of Week 2.

If Latex isn't working, you may be able to complete the Homework #0 using an online Latex editor, such as https://www.overleaf.com/. Click Create a new paper. Select Source instead of Rich Text at the top of the page, so you can familiarize yourself with the syntax.

(b) If you are new to using Latex, watch a Latex tutorial.

For a video tutorial, consider https://www.youtube.com/watch?v=W_yPJsF1X18&index=1&list=PLDD406480D35CE390, especially videos 1, 2, 4, 5, 6, 7. Videos are 3-4 minutes each.

These videos are made using the editor TeXworks, but the syntax and instructions apply to all the standard TeX editors.

Alternatively, for a written tutorial, consider http://xoph.co/20111024/latex-tutorial/, Sections 1, 2, 3, 5.

- (c) Download MyFirstDocument.tex from http://web.stanford.edu/~jchw/2015Math110#Homework (or copy-paste the text into your Tex editor) and experiment with the commands described in the tutorials.
- (d) Download Template.tex from http://web.stanford.edu/~jchw/2015Math110#Homework. Try to make sense of the system used in this template for creating and citing sections, subsections, definitions, theorems, proofs, etc. You will be asked to produce a Latex pdf document using this template on an upcoming homework assignment.