Honors Math A  
Homework 1

Carefully read the course syllabus.

Print and read the article “Introduction to mathematical arguments” by Michael Hutchings, available on the course home page. Then do exercises 1*, 2, 3*, 4*, 5*, 6, 7, 8* on p. 27. (In exercise 3, since we haven’t introduced numbers yet, you don’t need a formal proof; an informal discussion is sufficient.)

Also, read pp. 1-15 in Apostol. (The “Historical Introduction” is not essential to the course but gives a very good overview of what integral and differential calculus are about.) Then, from I 2.5 (pp. 15-16), do exercises 7a-b, 7c*, 9, 10, 14*, 18*, 20*. Only the problems marked * are to be written up and handed in. The rest are supplementary problems for your own benefit.

"What’s one and one and one and one and one and one and one and one and one and one?"

"I don’t know," said Alice. "I lost count."

"She can’t do addition," said the Red Queen.

—Lewis Carroll