MATH 0
Review of Basic Algebra

General Description

Introduction

This correspondence course is designed to be a review course in algebra; the material it covers is what is taught in high school algebra. When you complete this course you should be well prepared for an introductory college-level algebra course, such as Math 110. Math 0 does not carry any college-level credit toward graduation at The University of North Carolina at Chapel Hill.

This course is divided into sixteen lessons, four of which are closed-book tests. Each of the remaining lessons covers three sections of the text. The discussion sections of these lessons are meant to complement the associated sections of the text by highlighting the important topics, and in some cases, may offer an alternative approach to understanding the material. Finally, at the end of each lesson is a list of exercises for you to complete and turn in. There are no prerequisites for this course beyond a basic knowledge of arithmetic.

Text

The text for this course is *Intermediate Algebra*, by Tussy and Gustafson, 3rd edition (2006). You can purchase the text from the Higher Grounds bookstore in the Friday Center using the book order form included in this course manual, or you can buy it online at https://s4.its.unc.edu/HigherGrounds. There are ten chapters in the text; we will cover eight of them.

The text has a number of nice features that make it especially well suited for a correspondence course. Each chapter is

broken down into several short sections, each of which presents one or two new topics or techniques. Dispersed throughout each section are a number of "Self Check" exercises complete with answers. These are well worth doing. The answers to the odd-numbered exercises are provided in the back of the book. In addition, at the end of each chapter is a summary of the key concepts, a chapter review by section, and a practice chapter test. Cumulative review exercises are also available after each additional chapter covered.

It is unlikely that you will need to refer to any other books for this course as each lesson's assignment can be completed using only the material presented in that or previous lessons.

Written Assignments

All of the problems for each lesson come from the text. Like most subjects, the only way to learn math well is to practice. The more problems you work, the better you will understand the subject. At the end of each lesson is a list of practice problems. This is a very through list of the types of exercises you should be able to do, but you may work any additional exercises you choose.

When you turn in your assigned problems, please use your own notebook paper (don't tear pages out of your text). Each problem should be copied down, worked out, and the answer clearly marked. Please do not turn in the practice problems. Finally, please be kind to your instructor and keep your work neat. Not only will it be greatly appreciated, but it will help in assigning credit for the more involved problems.

Study Tips

As mentioned before, the text is especially well suited for a correspondence course. Here are some suggestions that may make your study easier and more effective:

1. First, read through the lecture notes in this course manual for the lesson.

2. Read the assigned section in the text before you attempt the written exercises.
3. Be an active reader; work through the examples in the text as you read them and answer the "Self Check" questions as you come to them. This will give you an indication of how well you understand the topics being presented.
4. Work the practice problems and other odd-numbered exercises until you feel confident, then try the written assignment.
5. Review your graded assignments when they are returned to you. Study and rework the problems that were difficult for you. This will help you avoid making the same mistakes on future assignments.

I strongly advise you to try the practice and cumulative tests at the end of each chapter. These questions are similar to the ones that you will find on the three closed-book tests and the final exam.

Appendix

The Appendix at the end of this course manual provides a list of important formulas that you should memorize and know how to use before each applicable test and the final.

Grading and the Final Exam

This course includes four closed-book tests (Lessons 4, 8, 12, and 16) and a final exam. You may use a calculator on the tests and on the final exam.

Each of the four tests will cover nine sections of material. The final exam will be supervised, and it will cover all of the material covered in the course. The final exam is just a little longer than the four tests, and you will have three hours to complete it, which should be plenty of time if you are well prepared. **You must pass the final exam in order to pass the course.**

Your final grade will be determined by your performance on your written assignments, the four tests, and the final exam. Your assignment average, test average, and the final exam score will each account for one-third of your grade. We will use a ten-point scale for course grades.

A	90–100
B	80–89
C	70–79
D	60–69
F	below 60.