

Duke University Talent Identification Program

Algebra I Learn On Your Own

Introduction

This course corresponds to a one-year high school Algebra I course and is based on the textbook Algebra 1: An Integrated Approach by Larson, Kanold, and Stiff (Evanston, Illinois: McDougal Littell Publishing, 1998). The Learn On Your Own Program enables academically motivated students to complete the Algebra I course at a rate that is consistent with their abilities.

The course materials provided by TIP include a detailed syllabus with assignments from each section in the textbook which is covered in the course, thirteen quizzes, three midterm exams, and a final exam. Each student should work with a parent, teacher, or community professional who can answer questions, check the assignments, grade the quizzes and tests, and assist the student with any difficulties he or she may encounter throughout the course. The student should also have a graphing calculator, preferably a Texas Instruments TI-82 or TI-83, with a user's manual. The textbook contains information about how to use graphing calculators and includes activities which require a graphing calculator.

The student should arrange an assignment schedule at the beginning of the course. Generally, students are more successful when they strictly adhere to the proposed schedule.

The following procedures should be followed by the student. Read each section thoroughly and study the examples in the textbook. Also read the syllabus; there may be additional information there. Complete the assignment from the section and check answers in the back of the book (The solutions to any assigned even-numbered problems are included on the syllabus.). If your answers are incorrect, reread the section and rework problems. If your answers are still not correct, ask your parent or teacher for help. Mastering each section before proceeding to the next is very crucial in any mathematics course. Mixed Review, Integrated Practices, Self-tests, and Chapter Review are provided throughout the book for additional practice. Students are encouraged to work problems from these sections if they feel that they need additional practice or study problems for quizzes and tests.

When indicated on the syllabus, take the quizzes and tests. Have your parent or teacher grade the quizzes or tests, discuss your mistakes, and recommend supplemental practice if necessary.

As a final note, graphing calculators can be wonderful tools in the process of learning algebra. However, you should **not** become so dependent upon them that you forget the basic algebraic processes for solving your problems. Always learn the theory and how to accomplish algebraic tasks by hand before allowing the calculator to do it for you!

Good luck!!