Kolbe Academy
Home School

GRADE EIGHT OR NINE
ALGEBRA I
Saxon Algebra 1

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♦ SYLLABUS ♦

Algebra I
Grade 8 or 9

COURSE TITLE: Algebra I

COURSE DESCRIPTION:

Students may begin this course after completing any pre-Algebra course, including the Saxon Math 8/7 (with pre-Algebra) course. Students who struggled with Saxon 8/7 are advised to use Saxon Algebra 1/2 prior to beginning an Algebra I course. Upon completion of Saxon's Algebra I, students may either continue with the Saxon program by using Saxon's Algebra 2 book, or may switch into a standard Geometry course using Jacob's Geometry. Please be advised that Saxon does not have a separate Geometry course. The author instead integrates all Geometry concepts throughout the Algebra I, Algebra II, and Advanced Math programs. It is advisable that all college bound students exclusively using the Saxon program complete through Advanced Math in order to cover all the Geometry and Trigonometry concepts that might appear on the PSAT, ACT, and SAT standardized tests.

SCOPE AND SEQUENCE:

This course covers, among other topics, the following:

1. division by zero
2. reciprocal and multiplicative inverse
3. exponents
4. algebraic phrases
5. word problems
6. canceling
7. ratio
8. conjunctions
9. dividing fractions
10. domain
11. elimination
12. closure
13. coin problems
14. algebraic proofs
15. rational equations functions

SKILLS TO BE DEVELOPED:

- problem-solving.
- use of diagrams and graphs.
- familiarity with the concepts and procedures of algebra.

DIPLOMA REQUIREMENTS:

Summa Cum Laude diploma candidates are required to follow the Kolbe Core course (K) track outlined in this Algebra I course plan. ***Magna Cum Laude*** and ***Standard*** diploma candidates may choose to pursue the (K) designation, but are not required to do so, and instead the parent has the option of altering the course plan as desired. ***Summa*** students must complete 4 years of mathematics during their high school course of study including the equivalent of Algebra I, Geometry, Algebra II, and Pre-Calculus (or higher). For a Summa student planning to use Saxon for their high school course of study, this means completing at minimum, the entirety of the *Saxon Advanced Math* program (meaning completing the entire *Saxon Advanced Math* text). ***Magna*** students must complete 3 years of mathematics during their high school course of study including Algebra I, Geometry, and Algebra II (or higher). For a Magna student planning to use Saxon for their high school course of study, this means completing at least through the Kolbe Advanced Math I course plan which covers a little over half of the *Saxon Advanced Math* book. ***Standard*** diploma students must complete 2 years of mathematics including Algebra I. Please see below for specific course titles, quarterly reporting requirements and transcript designations for Algebra I.

REQUIRED SAMPLE WORK:

Designation*		**K**
Course Title	**Algebra I**	**Algebra I**
Quarter 1	1. Any written sample of work	1. Completed Saxon Test 7
Quarter 2	1. Any written sample of work	1. Completed Saxon Test 15
Quarter 3	1. Any written sample of work	1. Completed Saxon Test 23
Quarter 4	1. Any written sample of work	1. Completed Saxon Test 30

***Designation refers to designation type on transcript. K designates a Kolbe Academy Core course.**

If the student wishes to have the course distinguished on the transcript with a (K) as a Kolbe Academy Core course, please be sure to send the correct exams and components each quarter for verification as specified above. **If no designation on the transcript is desired, parents may alter the lesson plan and any written sample work is acceptable to receive credit for the course each quarter.** If you have any questions regarding what is required for the (K) designation or diploma type status, please contact the academic advisory department at 707-255-6499 ext. 5 or by email at advisors@kolbe.org.

COURSE TEXT: *Saxon Algebra 1* (Third Edition)

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♦ COURSE PLAN ♦

Algebra I
Grade 8 or 9

COURSE PLAN METHODOLOGY:

Saxon advises that students complete all of the problems in the Saxon Algebra I program. Saxon uses a spiral methodology, meaning that many problems in the lessons review concepts learned in past lessons. This is especially helpful for students who tend to forget concepts soon after they are learned. Some students may be able to skip some of these review problems that occur in the lesson if they have mastered the technique. The fourth quarter of this course allows extra time for reviewing prior to testing since the most number of concepts will appear on these tests. Students who do not feel they need the extra review time may work ahead and finish the course early.

♦♦♦ FIRST QUARTER ♦♦♦

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
2	Lesson 6	Lesson 7	Lesson 8	Review	Test 1