

# Kolbe Academy Home School

## GRADE SEVEN MATHEMATICS *Saxon Math 8/7 with Pre-Algebra*

### TABLE OF CONTENTS

I. Syllabus	2
II. Daily Course Plan	
A. Quarter 1	4
B. Quarter 2	13
C. Quarter 3	22
D. Quarter 4	31
III. Tests	
A. Quarter 1	41
B. Quarter 2	
C. Quarter 3	
D. Quarter 4	
IV. Answer Keys	
A. Quarter 1	
B. Quarter 2	
C. Quarter 3	
D. Quarter 4	

**Resale & Copying Policy:** This course plan and all accompanying materials are not intended for resale or copying. Copying represents copyright infringement, which is illegal. Regarding reselling the materials, Kolbe Academy relies upon the continued purchase of our course plans for financial stability. As a Catholic Apostolate, we ask you to refrain from reselling Kolbe's course plans. While we cannot stop you from copying or reselling this course plan, we do strongly implore you not to do so.

**COURSE TITLE:** Mathematics

**COURSE TEXT:** *Saxon Math 8/7 with Pre-Algebra – Homeschool, Third Edition*

**COURSE DESCRIPTION:**

This course provides the student with an introduction to algebra, on a level to be used before Algebra 1 or before a pre-Algebra course. If a student completes this course with ease, he is ready to go onto Algebra 1. The student who struggles with this course is advised to continue with Saxon Algebra 1/2 or another pre-Algebra course. Although much of the same ground is covered, he will be able to attain greater mastery.

Be sure to read the introduction that Saxon provides at the beginning of their books. Each lesson should begin with a warm-up exercise with the Facts Practice Test as described in the introduction of *Saxon Math 8/7*. Each test provided by *Saxon Math 8/7* is cumulative, such that an entire week of review is not necessary for the quarterly exams. Quarterly exams are a compilation from the weekly tests given in that particular quarter.

Supplemental material is provided at the back of *Saxon Math 8/7* for selected lessons. This material is strictly optional. However, if the student is struggling in any particular area, this material should be used to reinforce the troubling concepts. The student should work at his own pace. He should not be held back by this outline if he is capable of going ahead, but he should not fall too far behind this outline. Care should be taken to make sure that the student completes all the problems, as well as all the supplemental work, in any trouble area.

**SCOPE AND SEQUENCE:**

- |                                |                                   |
|--------------------------------|-----------------------------------|
| 1. Factors                     | 17. Rates                         |
| 2. Fractions                   | 18. Percent                       |
| 3. Word Problems               | 19. Scientific Notation           |
| 4. Linear Measure              | 20. Liquid Measure                |
| 5. Polygons                    | 21. Circumference                 |
| 6. Perimeter                   | 22. Pi                            |
| 7. Prime and Composite Numbers | 23. Volume                        |
| 8. Mixed Numbers               | 24. Mean                          |
| 9. Multiples                   | 25. Median                        |
| 10. Common Denominators        | 26. Mode                          |
| 11. Decimal Numbers            | 27. Range                         |
| 12. Ratio                      | 28. Simple Probability            |
| 13. Graphs                     | 29. Semicircles                   |
| 14. Proportions                | 30. Surface Area                  |
| 15. Exponents                  | 31. Probability, Chance, and Odds |
| 16. Square Root                |                                   |

**COURSE PLAN METHODOLOGY:**

Kolbe Academy has worked diligently to create the best possible course plans with the home schooling family in mind. Remember, however, that our program is intended to be flexible. Per the principle of subsidiarity, these course plans are a **suggested** course of study. As the teacher, you should adapt and modify these course plans to meet the individual learning needs of your child. **Do not feel obligated to follow these course plans exactly.**

*Saxon Math 8/7 with Pre-Algebra* is represented by the abbreviation **SAX**. Each weekly assignment is summarized in the first line of the week's daily course plan. The specific daily assignments are outlined in the following lines indicated by the **DAY 1**, **DAY 2**, **DAY 3**, **DAY 4**, and **DAY 5** abbreviations. Parent daily guidelines are given to the left of the student assignments. Although most of Kolbe Academy Home School course plans are set up for a four-day week, the mathematics courses at this level do benefit from a five-day week schedule. This can be altered if the student would like to double up on an assignment or test on the final day of their week. A family's schedule can and should vary as needed.

A weekly grade book is included at the end of the week's course plan *as a convenience*. It includes a cumulative list of written assignments from the week's course plan with point values given as a suggestion. Space for additional assignments, if needed, is included. **Kolbe Academy does not require that you keep record of all student work.** If you intend to report your child's work to Kolbe Academy for an official report card, only one sample of written and graded work is required per quarter for each course along with a report card submission. Parents should use the grade book only as a help to their home schooling and not as hindrance. Point values and weighting are suggested for *convenience* and may be modified, dropped completely, or added to as the parent deems fit. Please consult the welcome packet for a full tutorial on using the grade book.

This history course contains 36 weeks broken into four 9-week quarters. Week 8 is considered a review week and week 9 is dedicated strictly to examination. Your student may not need all of Week 8 for review. You can use this time to catch up if necessary and then go over the subject matter. **If you intend to use the tests provided, look them over before teaching the subjects and make sure you teach the material in the tests.**

Finally, begin every class with a prayer. This is a good way to help the child memorize new prayers. Repeat the same ones every day until they are known. Be sure to explain the meanings of the prayers. Repetition in all areas of study is most beneficial.

◆◆◆ FIRST QUARTER ◆◆◆

WEEK 1				
Book	Weekly Breakdown	Goals and Notes for the Week		
SAX	Lessons 1 - 5	The Facts Practice Sheets should be used as a warm-up for each Lesson assigned. An overall grade for these worksheets should be given for the week. Students will cover: arithmetic with whole numbers and money, variables and evaluation, properties of operations, sequences, missing numbers in addition, subtraction, multiplication, and division, the number line, place value through hundred trillions, and reading and writing whole numbers.		
WORK	Pages 13 - 17			
Notes				
Student Daily Assignments		<input checked="" type="checkbox"/>	Parent Daily Guidelines	
DAY 1	Do WORK Page 13	<input type="checkbox"/>	Have the student warm up for Lesson 1 with the Facts Practice Test A in WORK. Go over Lesson 1 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 1	<input type="checkbox"/>		
DAY 2	Do WORK Page 14	<input type="checkbox"/>	Have the student warm up for Lesson 2 with the Facts Practice Test A in WORK. Go over Lesson 2 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 2	<input type="checkbox"/>		
DAY 3	Do WORK Page 15	<input type="checkbox"/>	Have the student warm up for Lesson 3 with the Facts Practice Test A in WORK. Go over Lesson 3 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 3	<input type="checkbox"/>		
DAY 4	Do WORK Page 16	<input type="checkbox"/>	Have the student warm up for Lesson 4 with the Facts Practice Test A in WORK. Go over Lesson 4 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	DO SAX Lesson 4	<input type="checkbox"/>		
DAY 5	Do WORK Page 17	<input type="checkbox"/>	Have the student warm up for Lesson 5 with the Facts Practice Test A in WORK. Go over Lesson 5 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	DO SAX Lesson 5	<input type="checkbox"/>		
Week 1 Grade Book				
Assignments	Include <input checked="" type="checkbox"/>	(A) Points Earned	(B) Possible Points	A/B x100 =% (C)
Lesson 1	<input type="checkbox"/>			
Lesson 2	<input type="checkbox"/>			
Lesson 3	<input type="checkbox"/>			
Lesson 4	<input type="checkbox"/>			
Lesson 5	<input type="checkbox"/>			
Facts Practice Sheets	<input type="checkbox"/>			
Other:	<input type="checkbox"/>			
<b>Week 1 Average</b>	<b>Add up column C &amp; divide by number of included <input checked="" type="checkbox"/> assignments =</b>			<b>%</b>

◆ COURSE PLAN ◆

WEEK 2				
Book	Weekly Breakdown	Goals and Notes for the Week		
SAX	Lessons 6 - 10	Students will cover: factors, divisibility, lines, angles, fractions, percents, inch ruler, adding, subtracting, and multiplying fractions, reciprocals, writing division answers as mixed numbers, and improper fractions.		
WORK	Pages 18 - 22			
Notes				
Student Daily Assignments		<input checked="" type="checkbox"/>	Parent Daily Guidelines	
DAY 1	Do WORK Page 18	<input type="checkbox"/>	Have the student warm up for Lesson 6 with the Facts Practice Test B in WORK. Go over Lesson 6 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 6	<input type="checkbox"/>		
DAY 2	Do WORK Page 19	<input type="checkbox"/>	Have the student warm up for Lesson 7 with the Facts Practice Test B in WORK. Go over Lesson 7 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 7	<input type="checkbox"/>		
DAY 3	Do WORK Page 20	<input type="checkbox"/>	Have the student warm up for Lesson 8 with the Facts Practice Test A on page 35 in WORK. Go over Lesson 8 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 8	<input type="checkbox"/>		
DAY 4	Do WORK Page 21	<input type="checkbox"/>	Have the student warm up for Lesson 9 with the Facts Practice Test B on page 36 in WORK. Go over Lesson 9 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	DO SAX Lesson 9	<input type="checkbox"/>		
DAY 5	Do WORK Page 22	<input type="checkbox"/>	Have the student warm up for Lesson 10 with the Facts Practice Test A in WORK. Go over Lesson 10 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	DO SAX Lesson 10	<input type="checkbox"/>		
Week 2 Grade Book				
Assignments	Include <input checked="" type="checkbox"/>	(A) Points Earned	(B) Possible Points	A/B x100 =% (C)
Lesson 6	<input type="checkbox"/>			
Lesson 7	<input type="checkbox"/>			
Lesson 8	<input type="checkbox"/>			
Lesson 9	<input type="checkbox"/>			
Lesson 10	<input type="checkbox"/>			
Facts Practice Sheets	<input type="checkbox"/>			
Other:	<input type="checkbox"/>			
<b>Week 2 Average</b>	<b>Add up column C &amp; divide by number of included <input checked="" type="checkbox"/> assignments =</b>			<b>%</b>

◆ COURSE PLAN ◆

WEEK 3				
Book	Weekly Breakdown	Goals and Notes for the Week		
SAX	Investigation 1 Lessons 11 - 13	Students will cover: fractions and percents with manipulatives, problems and combining, problems about separating, problems about comparing, elapsed-time problems, and problems about equal groups.		
WORK	Test 1 Pages 23 - 39			
Notes				
Student Daily Assignments		<input checked="" type="checkbox"/>	Parent Daily Guidelines	
DAY 1	Do WORK Page 23	<input type="checkbox"/>	Have the student warm up before Test 1 with the Facts Practice Test A on page 23 in WORK. Administer Test 1, page 183 in WORK.	
	Do WORK Test 1	<input type="checkbox"/>		
DAY 2	Do SAX Investigation 1	<input type="checkbox"/>	Have the student do Investigation 1 on <i>Frequency Tables, Histograms, and Surveys</i> . Pages 25 – 30 in WORK are available for use with Investigation 1.	
DAY 3	Do WORK Page 37	<input type="checkbox"/>	Have the student warm up for Lesson 11 with the Facts Practice Test C in WORK. Go over Lesson 11 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	Do SAX Lesson 11	<input type="checkbox"/>		
DAY 4	Do WORK Page 38	<input type="checkbox"/>	Have the student warm up for Lesson 12 with the Facts Practice Test C in WORK. Go over Lesson 12 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	DO SAX Lesson 12	<input type="checkbox"/>		
DAY 5	Do WORK Page 39	<input type="checkbox"/>	Have the student warm up for Lesson 13 with the Facts Practice Test C in WORK. Go over Lesson 13 with the student and do the Practice Set with the student. Assign the Mixed Practice to the student.	
	DO SAX Lesson 13	<input type="checkbox"/>		
Week 3 Grade Book				
Assignments	Include <input checked="" type="checkbox"/>	(A) Points Earned	(B) Possible Points	A/B x100 =% (C)
Test 1	<input type="checkbox"/>			
Investigation 1	<input type="checkbox"/>			
Lesson 11	<input type="checkbox"/>			
Lesson 12	<input type="checkbox"/>			
Lesson 13	<input type="checkbox"/>			
Facts Practice Sheets	<input type="checkbox"/>			
Other:	<input type="checkbox"/>			
<b>Week 3 Average</b>	<b>Add up column C &amp; divide by number of included <input checked="" type="checkbox"/> assignments =</b>			<b>%</b>