## Math 6

Scripted Lesson Plans

## INTRODUCTION

Math is a concept-oriented discipline that builds on prior mastery. Moving on from a concept without having mastered it to the next concept is fraught with possible problems. That is why we like Saxon Math in the grammar school years. Its three-steps-forward, two-steps-back way of building and reviewing minimizes such problems.

As you may have observed, we recommend Saxon Math ahead of the grade level recommended by the publisher. It is our opinion that, based on the experience of thousands of children, our knowledge of historic standards, and observation of other countries where math is a strong suit, this is quite reasonable. However, we realize that your children may not be ready to do this yet. Taking them from where they are is necessary. The pace at which you go from there is your call.

There are those children who are ready to tackle beyond the level that we recommend. Starting them higher would generally not be as effective as moving them faster.

With math, keeping them challenged without frustrating them is a key goal.

## GRADE BY GRADE

Below is the grade-by-grade breakdown for Math.

| Grade | Curriculum |
| :--- | :--- |
| Kindergarten | Saxon 1 |
| 1 $_{\text {st }}$ | Saxon 2 |
| $2^{\text {nd }}$ | Saxon 3 |
| $3^{\text {rd }}$ | Saxon 54 |
| $4^{\text {th }}$ | Saxon 65 |
| $5^{\text {th }}$ | Saxon 76 |
| 6 $^{\text {th }}$ | Saxon Algebra $1 / 2$ |

## BEFORE YOU BEGIN

1. For Saxon 1, 2 and 3
a. Read the Home Study Overview in the Teacher's Manual.
b. Refer to the Veritas Press Scholars Lesson Plans, Lesson 1 for Books and Materials that will be needed to begin.
c. You are ready to begin.
2. For Saxon 54, 65, 76 and Algebra $1 / 2$
a. Become familiar with introductory materials.
b. Refer to the Veritas Press Scholars Lesson Plans, Lesson 1 for Books and Materials that will be needed to begin.
c. You are ready to begin.

## ADDITIONAL THOUGHTS

Math textbook writers are known for expecting children to do every problem in every problem set. The folks at Saxon are no different. We agree with them in early levels and have generally not skipped any problems in what we recommend in the Lesson Plans through and including Saxon 65. Beginning with Saxon 76, there are times where
we don't see the necessity of doing all the problems. In such instances we have carefully selected the ones we believe most beneficial.

You will need to be the judge of whether your children are able to master the material as we have recommended. There will certainly be instances where doing more problems will be beneficial and there will be instances where even doing all that we recommend will not be the best use of the time available.

## lesson 1

# Whole Number Place Value • Expanded Notation • Reading and Writing Whole Numbers • Addition 

## BOOKS

Saxon Algebra 1/2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will identify whole number place values. Child will write a number in expanded notation. Child will read and write whole number names. Child will review addition of whole and decimal numbers.

## TEACHING

Do Lesson 1, pgs. 1-5 of textbook.
ALERT: We have carefully selected a portion of the problems from the Mixed Practice pages. This was done because doing the whole problem set every time one is presented is both too time-consuming and unnecessary for the overwhelming majority of children. It will be obvious in a couple lessons if this approach is working by the number of mistakes students make. It should be noted that mistakes can come from carelessness. If this becomes a persistent problem one thing that we have found to be effective is to require the children to redo the problems where they were careless. After a short time they will find that only having to do it once is better.

ALERT: Remind the child not to use the word "and" when reading and writing whole numbers. 642 is read "six-hundred forty two" not "six-hundred AND forty two." The word "and" is used when reading the decimal point of a number.

## ASSIGNMENT

Problem Set 1, pgs. 5-6 of textbook
Suggested Questions: 1-3, 5-7, 11, 14-18 even, 22, 23, 27-30COMPLETEDGRADED

Solutions for Practice problems and Problem Set 1 are in Homeschool Packet, pg. 47.

## The Number Line and Ordering • Rounding Whole Numbers

## BOOKS

Saxon Algebra 1/2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## OBJECTIVE

Child will read points on a number line and arrange numbers in order. Child will round numbers.

## TEACHING

Do Lesson 2, pgs. 7-9 of textbook.

## ASSIGNMENT

Problem Set 2, pgs. 9-10 of textbook
Suggested Questions: 1, 2-10 even, 13-16, 18-20, 21, 22, 29, 30COMPLETEDGRADED

Solutions for Practice problems and Problem Set 2 are in Homeschool Packet, pg. 47.

## Subtraction • Addition and Subtraction Patterns

## BOOKS

Saxon Algebra 1 / 2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will review subtraction basics. Child will review the inverse operations of addition and subtraction and how that is used to find missing numbers in addition and subtraction problems.

## TEACHING

Do Lesson 3, pgs. 11-13 of textbook.

## ASSIGNMENT

Problem Set 3, pgs. 13-14 of textbook
Suggested Questions: 1-5 odd, 8, 10, 11, 13, 15-18, 21, 22, 25, 27-30COMPLETEDGRADED

Solutions for Practice problems and Problem Set 3 are in Homeschool Packet, pg. 47.

## Multiplication • Division • Multiplication and Division Patterns

## BOOKS

Saxon Algebra 1 / 2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will review the basics of multiplication and division. Child will review how to solve missing number problems involving multiplication and division.

## TEACHING

Do Lesson 4, pgs. 15-18 of textbook.

## ASSIGNMENT

Problem Set 4, pg. 19 of textbook
Suggested Questions: 3-8, 9-20, 24-26, 28, 30COMPLETEDGRADED

Solutions for Practice problems and Problem Set 4 are in Homeschool Packet, pg. 48.

## Addition and Subtraction Word Problems

## BOOKS

Saxon Algebra 1 / 2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## OBJECTIVE

Child will review addition and subtraction work problems and how to recognize the pattern of the problem.

## TEACHING

Do Lesson 5, pgs. 20-21 of textbook.

## ASSIGNMENT

Problem Set 5, pgs. 21-22 of textbook
Suggested Questions: 1-5, 7-21 odd, 22, 23, 26-28, 30COMPLETEDGRADED

Solutions for Practice problems and Problem Set 5 are in Homeschool Packet, pg. 48.

# Reading and Writing Decimal Numbers • Adding and Subtracting Decimal Numbers • Rounding Decimal Numbers 

## BOOKS

## MATERIALS

Saxon Algebra 1 / 2 Textbook
Graph Paper or Lined Paper
Saxon Algebra 1/2 Homeschool Packet

## OBJECTIVE

Child will review reading and writing decimal numbers by name. Child will review adding and subtracting decimal numbers. Child will review the process of rounding decimal numbers.

## TEACHING

Do Lesson 6, pgs. 23-26 of textbook.

## ASSIGNMENT

Problem Set 6, pgs. 26-27 of textbook
Suggested Questions:1-5, 6-16 even, 18-20, 22, 23, 25, 27, 28COMPLETEDGRADED

Solutions for Practice problems and Problem Set 6 are in Homeschool Packet, pg. 48.

## Multiplying Decimal Numbers • Dividing Decimal Numbers • Estimation

## BOOKS

Saxon Algebra 1 / 2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will multiply and divide decimal numbers. Child will use estimation to determine if an answer is reasonable.

## TEACHING

Do Lesson 7, pgs. 27-30 of textbook.

## ASSIGNMENT

Problem Set 7, pgs. 30-31 of textbook
Suggested Questions: 2, 4, 7, 9-11, 12-19, 21, 25, 26, 28, 29COMPLETEDGRADED

Solutions for Practice problems and Problem Set 7 are in Homeschool Packet, pg. 48.

# Multiplying and Dividing by Powers of $10 \cdot$ Ordering Decimal Numbers 

## BOOKS

Saxon Algebra 1 / 2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will mentally multiply and divide a number by a power of 10 . Child will place decimal numbers in order of value.

## TEACHING

Do Lesson 8, pgs. 31-33 of textbook.
ALERT: Have the child pay special attention to the bold type on pgs. 31 and 32. These succinctly state the process being taught.

## ASSIGNMENT

Problem Set 8, pgs. 33-34 of textbook
Suggested Questions: 1-6, 9, 10, 12, 13-21 odd, 22-25, 26, 28COMPLETEDGRADED

Solutions for Practice problems and Problem Set 8 are in Homeschool Packet, pgs. 48-49.

## Test 1

## BOOKS

Saxon Algebra $1 / 2$ Test Forms
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Copy of divided Graph Paper for Test Solutions in
back of Test Forms

## OBJECTIVE

Child will demonstrate understanding of the material through a written assessment.

## TEACHING

Have the child take Test 1 using a copy of the divided graph paper to record their answers and work. Correct test problems using solutions found on pg. 1 of Homeschool Packet.

## ASSIGNMENT

Test 1COMPLETEDGRADED

Have the child complete Test 1.

## Points, Lines, Rays, and Line Segments • Angles • Perimeter

## BOOKS

Saxon Algebra $1 / 2$ Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will identify points, lines, rays, curves and line segments. Child will calculate the measurement of portions of a line segments. Child will classify angles and calculate the perimeter of a shape.

## TEACHING

Do Lesson 9, pgs. 34-38 of textbook.

## ASSIGNMENT

Problem Set 9, pgs. 38-39 of textbook
Suggested Questions: 2, 4, 5, 9, 10, 12-14, 15, 16, 18, 21, 23, 24, 26, 28, 30COMPLETEDGRADED

Solutions for Practice problems and Problem Set 9 are in Homeschool Packet, pg. 49.

## Divisibility

## BOOKS

Saxon Algebra 1 / 2 Textbook

## MATERIALS

Saxon Algebra 1/2 Homeschool Packet

## OBJECTIVE

Child will determine if a number is divisible by another whole number with no remainder.

## TEACHING

Do Lesson 10, pgs. 39-40 of textbook.

## ASSIGNMENT

Problem Set 10, pgs. 40-41 of textbook
Suggested Questions: 1-29 oddCOMPLETEDGRADED

Solutions for Practice problems and Problem Set 10 are in Homeschool Packet, pg. 49.

## Word Problems about Equal Groups

## BOOKS

Saxon Algebra 1 / 2 Textbook

## MATERIALS

Graph Paper or Lined Paper
Saxon Algebra 1/2 Homeschool Packet

## OBJECTIVE

Child will solve word problems involving equal groups.

## TEACHING

Do Lesson 11, pgs. 42-43 of textbook.

## ASSIGNMENT

Problem Set 11, pgs. 43-44 of textbook
Suggested Questions: 1-4, 6, 9, 12, 14, 16, 19, 21, 22, 24, 26, 27, 29COMPLETEDGRADED

Solutions for Practice problems and Problem Set 11 are in Homeschool Packet, pg. 49.

## Prime Numbers and Composite Numbers • Products of Prime Numbers

## BOOKS

Saxon Algebra 1 / 2 Textbook
Saxon Algebra 1/2 Homeschool Packet

## MATERIALS

Graph Paper or Lined Paper

## OBJECTIVE

Child will differentiate prime and composite numbers. Child will determine the prime factorization of a number.

## TEACHING

Do Lesson 12, pgs. 45-46 of textbook.

## ASSIGNMENT

Problem Set 12, pgs. 47-48 of textbook
Suggested Questions: 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16-18, 21, 24, 25, 28COMPLETEDGRADED

Solutions for Practice problems and Problem Set 12 are in Homeschool Packet, pgs. 49-50.

