

Dive

## Parents: Course Setup \& Login

While the instruction, grading, and Q\&A support are provided, a parent or teacher should supervise to ensure the student follows the course instructions. Don't worry! You don't need to know anything about math! Simply follow these steps:

1. Please watch with your student: Getting Started
2. CRITICAL: Read Parent Responsibilities \& How to Check Student Work
3. To ensure your device is setup for our eLearning system, please follow the:

Computer \& Device Setup Instructions
4. Print these Student Instruction Sheets:

- Reading Assignment Instruction
- Note-Taking Instruction Sheet
- Practice Set Instruction Sheet
- Quiz Instruction Sheet
- Study for Exams Instruction Sheet

5. Review: The Timed Method \& Algebra Prep Drills
6. Required Materials:

- Ruler \& Drawing Compass or the free Geometry App
- Select a Recommended Calculator
- A 2-inch binder and 3-hole paper (blank or college-ruled). Lecture notes, corrections and homework may be done in this binder. OR A spiral notebook with college-ruled paper for lectures and corrections plus copy paper for homework lessons
- Small spiral notebook (4x6) for formulas

7. Parents: Login to the eLearning Campus here: Login Instructions

## Important Resources

Grade Changes and Resets NCAA
Ask Dr. Shormann a Homework.
Advanced Placement
Test, or Quiz Question
Transcripts \& Credits

## Contact Tech Support

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Shormann Math combines tried and true teaching methods with 21st Century technology. It is a user-friendly course with video lectures, interactive homework, automated grading, grade recording, video solutions, and Q\&A email support.

Shormann Algebra 1 and 2 integrate 7 full credit of geometry. When finished with both, one full credit of algebra 1, 2, and geometry are earned! All the concepts required for a variety of standardized tests, including the redesigned PSAT and SAT, ACT, and the CLEP College Algebra and College Mathematics exams, are taught, then continually reviewed, developing fluency and raising test scores.

After completing Shormann Algebra 1 and 2, students can spend 2-3 weeks using our CLEP Professor College Algebra, a short prep course included in the Shormann Algebra 2 eCourse, to prepare for the CLEP exam and earn up to 3 college credits.

My primary goal is to teach students how math connects to their world and their Creator. I do this by teaching math as the language of science and a tool for understanding God and the world He created. In doing so, I pray that our courses will strengthen the student's relationship with Christ in ways that will help them be productive members of society who seek to glorify God in all they do!

## Pre-requisites

Pre-algebra (any publisher)
Or Saxon Math 8/7 or Saxon Algebra $1 / 2$

## Credits

1 Algebra 1 Credit
1/2 Geometry Credit

## Course Description

Shormann Algebra 7 with Integrated Geometry teaches all the concepts required for a 21st Century integrated Algebra 1 and Geometry course, including simplifying algebraic expressions, solving equations (linear and quadratic) and linear systems. Standard geometry concepts include proof, logic, Euclidean geometry and perimeter/area/volume. Other topics include measurement, computer math, technology applications, statistics and a gentle introduction to basic calculus. This course has 100 lessons, 26 weekly quizzes, and four quarterly exams. Official Course Description and Credits

Scope \& Sequence: Shormann Algebra 1 Scope and Sequence

## Honors or Standard Course Options

While Shormann Algebra 1 can be taken over three semesters, students who complete the course in a typical school year or less and use the Honors Grade Scale can list it as an honors course on their transcript.

Learn More: Credits \& Transcripts

## Honors Course Descriptions

Honors Grade Scale
A - 93-100
B-84-92
C-74-83
D-65-73
F-64 or below
I- Incomplete

Standard Grade Scale
A - 90 -100
B-80-89
C-70-79
D-60-69
F-59 or below
I- Incomplete

## Using Shormann Math in a Classroom or Co-op

The beta-test of Shormann Algebra 1 was performed with students in a weekly live online classroom. Shormann Math works well in a homeschool co-op style class that meets weekly. Students complete their daily lessons at home, and come to class to review the week's lessons, take the weekly quiz, and turn in handwritten work + lecture notes. At the end of each quarter, they can take the online quarterly exam in class, or take a different one administered by the teacher. For more information on starting a co-op class in your area, see How to Use Shormann Math in a Co-op

## Standardized Test Prep

While Shormann Math helps students use math to become more creative like their Creator, glorifying Him and serving others, it also provides excellent preparation for standardized tests. By the time a student finishes Shormann Math Algebra 1 and 2, they will have covered all the math concepts presented on the redesigned PSAT and SAT, as well as the ACT, CLEP College Algebra and CLEP College Math exams!

From Lessons 26-100, Practice Set problem \#15 will ask a question about a concept covered on either the SAT, ACT, CLEP College Math, or CLEP College Algebra exam. These concepts will only appear in the Practice Set after they have been taught in a lesson. Learn more at the link below. PSAT, SAT, and ACT Test Prep Recommendations

## Parent Responsibilities

While the eLearning course provides all the instruction and grading, it is the parent's responsibility to check their student's work to ensure the student is using the course as directed and to supervise students during the 4 exams. Please follow these steps after each lesson is completed:

## How to Check Student Work

## I. Check the Lecture Notes

(1)

After each lesson is completed, have the student bring their notebook to you, which should have their notes and corrections.
(2) Go to diveonline.educadium.com. Login

In the right menu, select the Lesson \#.

This opens the Assignment Page. Select "Textbook Pages"
3. Place your cursor over "My Courses" then, select "Pre-Algebra"





After each example problem is taught, students should pause the lecture \& solve the example problem on their notes.

Briefly compare the example problems in the textbook pages to the example problem in the student's notes.


They should also take brief notes with the lesson title, headings, key points, and formulas.


LESSON

## TITLE



## II. Check the Practice Set

1
Go back to the Assignment page then, select the link to the Practice Set.


Select the link to the "PDF Solutions". If you don't see it, read the note below.


If you see this instead of the PDF solutions link, stop here and refer to \#1 in the "Solutions" section.

Before entering or selecting an answer, students should solve each math problem on their Practice Set Notes.
(3) Briefly compare the PDF Solutions to the student's notes.


## III. Check the Corrections

After completing the Practice Set, students should watch the video solutions for each question marked wrong then, solve it correctly on their notes.
(1) Compare the corrections on the student's notes to the Solutions PDF

2 Did the student solve each incorrect problem on their "Corrections" page?


## ISSUES WITH STUDENT WORK

Issue \#1: Continue Last Attempt

Summary of your previous attempts
Attempt State

This means the student either did not finish the assigment or they forgot to select the "Submit All \& Finish" button.

If the student DID answer all the questions he could, simply click the "Continue Last Attempt" button to submit the assignment. Then, have the student follow the steps on page 2 of the "Instruction Sheet for Practice Sets" to watch the video solutions for missed problems and correct them on paper.

If the student DID NOT answer all the questions he could, he should finish the assignment by following the steps on the "Instruction Sheet for Practice Sets" to answer all the questions he can and submit it. Then, follow the steps on page 2 of the "Instruction Sheet for Practice Sets" to watch the video solutions for missed problems and correct them on paper.

## Issue \#2: More than one attempt is listed.

The eLearning course allows students to re-take practice sets to study for exams. But, only the first attempt is recorded in the online grade book.

Because the student sees all the answers after the first attempt, we recommend you use only the first attempt when checking the student's work.

The Instruction Sheet has important instructions on how to use help links, access the video solutions, ask Dr. Shormann a question, and more!

Low or Failing Grade: Do NOT retake Practice Sets. Instead, watch the video solutions and correct as instructed in \#6 on the Instruction Sheet.

When you are ready to start, select "Attempt Quiz Now".
Note: This is not a quiz. The system calls all graded activities a quiz.
Grading method: First attempt

Summary of your previous attempts

| Attempt | State |
| :---: | :--- |
| 1 | Finished <br> Submitted Saturday, October 10, 2020, 9:13 AM |
| 2 | Finished <br> Submitted Friday, October 16, 2020, 5:33 PM |


| Points/11.00 | Grade/100.00 | Review |
| :---: | :---: | :---: |
| 0.00 | 0.00 | Review |
| 5.00 | 45.45 | Review |

First attempt: 65.00 / 100.00.

## Scheduling

Shormann Algebra 1 is set up on a 30 week schedule. Since a school year is generally 36 weeks, there are six additional weeks that can be used when extra time is needed to grasp a concept. A good way to ensure the student has time to relearn, as needed, is to use the timed method (below).

## Timed Method: Frustration Free Math

Instead of requiring the student to complete a lesson each day, have Algebra 1 students work on math for no more than an hour to an hour and a half per day. At the end of this time, regardless of how much of the lesson is completed, stop the lesson and have them pick-up where they left off the next day. Strong math students can work on math at least 4 days per week and struggling or reluctant math students should work on math 5 days per week.

This allows the student to learn at their own pace, giving them the extra time needed to grasp a new concept or relearn forgotten concepts by rewatching video lessons, studying the help links, etc. On the other hand, when a student is required to complete a lesson per day, they quickly realize that going back and relearning can make the lesson take too long and they will likely skip this critical step. I cannot overemphasize the importance of relearning in the process of developing fluency (speed and accuracy). As fluency develops, the student will complete more and more of the lesson each day. Frustration Free Learning

## Two or Three Semester Course

Because one and a half credits are earned (1 Algebra 1 and $1 / 2$ Geometry), this course can also be stretched to a three semester course. If a 50 or higher is earned on the CLEP College Algebra exam, an additional high school math credit can be listed on the transcript. This means the course can be stretched even longer. Each eLearning subscription is good for 24 months so every student can successfully complete the course.

## Don't Expect Immediate Mastery

I strongly discourage incorporating "immediate mastery" methods into Shormann Math (Saxon Math, too!). For example, some parents and teachers will not let the student progress to the next lesson unless they have completely mastered the current lesson. This can cause discouragement and exasperation.

Just like in sports or music, it takes time to learn a skill. Most students need to practice a skill over several days before mastery is achieved. That's why the Practice Sets review previous concepts over a long period of time. So, please use the system like it was designed, and give your student time to patiently practice and build their skills!

## Focus on Fluency

Fluency means speed and accuracy. The only way to develop fluency is by practicing the skill correctly over a long period of time. Think of a baseball pitcher or a concert pianist. How many times do they practice the same pitch or piece? How many times do they do it wrong while they are learning? Don't be surprised when your child gets the same problem wrong multiple times while they are learning. The key is to relearn the concept and try again.

Conversely, giving the solution before relearning will erode mastery. So instead of "helping" or letting the student see the answer, encourage students to relearn by using the links above each Practice Set question. There is a link to a similar example problem and a link to the video lecture that teaches that concept. In the beginning this process may be slow and laborious. Be patient, use the timed method, and eventually math will be faster and easier.

## Course Components

I. Lessons: A daily lesson consists of 3 parts:

- Reading Assignments (Rules and Definitions): Instruction Sheet
- Video Lecture: Instructions for Lectures
- Practice Set: Practice Set Instructions


## II. Quizzes: Quiz Instruction Sheet

## III. Quarterly Exams: Quarterly Exams Instruction Sheet

## Online Grade Book \& Grading

Note: If your student has a learning disability or you are not using the course as instructed (skipping assignments, giving more time on exams, etc.), see the Learning Disabilities section below.

1. Login using the same login as the student, select "My Courses" in the top menu, then select the course title. In the top right corner, select the student's name, then "Course Grades".

2. The grade book will open.

## Grade Book: Joe Smith

|  | Your Student's Grades | Average Grade of All <br> Students in this Course |  |
| :--- | :---: | :---: | :---: |
| Assignments | Grade | Percentage | Class Average | | Grading Shormann Prealgebra |
| :--- |
| Lesson 1 Practice Set |
| Lesson 2 Practice Set |

Grade: This is your student's grade in points.
Percentage: This is your student's grade as a percentage.
Class Average: This is NOT your student's grade. It's the average grade of ALL the students who have taken this assignment.

## Running Average:

Scroll down to the bottom of the grade book and find the Running Average. This is the grade for all the assignments that have been completed so far. It does not include the zero for assignments that have not been completed. So, as long as the student has not skipped any assignments, this is where you would see the student's current grade based on the assignments they have completed.

## Assignments $\quad$ Grade Percentage Class Average



## Final Grade:

This is the grade used at the end of the course for the final grade. It includes the zeros for assignments that were not completed. In this example, only a few of the assignments have been completed so the final grade is very low. At the end of the course, if all assignments are completed, the Final Grade and Running Average are the same. If they are not, see the solutions below.

## Add Extra Credit to the Final Grade

For details, see "Optional Extra Credit" below.

## Transcripts \& Credits

For a free transcript template and detailed instructions, see Transcripts \&

## Credits

## ISSUES WITH THE GRADE BOOK

## Issue 1: Final Grade and Running Average Are Not the Same

This means one or more assignments were not completed. Scroll through the grade book and look for assignments in the "Percentage" column that don't have a grade. See the next section to resolve this issue.

## Issue 2: No Grade in the Percentage Column

1. Select the title of the assignment in the Grade Book.
2. If there is a button that says "Continue Last Attempt", this means the student opened and/or started the assignment but did click Submit All \& Finish. Select the "Continue Last Attempt" button, "Finish Attempt" then, "Submit All \& Finish".
3. If there is a "Start Quiz" button, this means the student did not start the assignment. You can either leave it as a O or have the student do the assignment, which will raise the final grade.

## Grade Weights

The following describes how the grades are "weighted".
Practice Sets \& Practice Exams: 30\%
Weekly Quizzes: 30\%
Quarterly Exams: 40\%

## Optional: Add Extra Credit

Keep in mind, as the parent and/or teacher, you are responsible for assigning grades. Our grading system is a tool to help you. You are not required to use the grades in the eLearning grade book or follow any of our recommendations. Use the course like you would any other curriculum, like Abeka or Bob Jones.

If your student corrected missed problems for all assignments, extra credit can be added at the end of the course by following the option below. However, this is optional because the eLearning system already includes some extra credit by allowing students to take the exams twice and averaging the scores which is like adding up to 10 points to each exam grade.

Option 1: Add up to 3 points to the Final Grade in the Grade Book. (The final grade should not be more than 100 .)

Option 2: Use the "Simplified Grading Method" below.
After determining the final grade, add it to the Certificate (see below).

## Certificate of Completion

Upon course completion, a certificate of achievement can be printed. Go to the Course Home page, scroll down the left menu, then click Certificate. There are detailed instructions on how to save, edit, and print the certificate.

## Learning Disabilities: How to Modify the Timed Quizzes and Exams

 While we cannot change the timer on the exams or quizzes, you can give the student more time by following these steps. However, you will need to manually record grades or use the "Simplified Grading Method" (see above) instead of using the online grade book.
## Quizzes: How to Modify the Time

Parent Supervision Required: After the first attempt, the Results Page with all the answers is displayed. Quizzes have a 20 minute time limit and four questions. To double the time to 40 minutes, follow these steps:

1. The student should study using the Study Instructions just above the link to the quiz.
2. Have the student take the quiz twice. In the first attempt, complete only the first two questions. In the second attempt, complete the last two questions.
3. Add the two scores together.
4. Have the student correct missed problems by following the Quiz Instructions linked above the quiz.
5. Use the "Simplified Grading Method" below.

## Exams: How to Modify the Time

Parent Supervision Required: The exams are limited to one hour. This method doubles the time to two hours.

1. Study using the Study Instructions linked just above the exam.
2. Have the student take the exam twice. In the first attempt, complete only the first half of the exam. In the second attempt, complete the second half. This gives the student 2 hours to complete the exam.
3. Add the two scores together.
4. Have the student correct all missed problems on paper. If they correct all missed problems, add $\mathbf{1 0 0}$ points to their grade. Then, divide it by two. This is the equivalent of giving them two full attempts and averaging the scores.
5. For grade recording and calculating a final grade, see the next section below.

## Grading for Learning Challenged Students

Because students with learning challenges often require many accommodations, instead of using the grades in the eLearning course and submitting multiple grade change requests, manually record the four exams, then use the Simplified Grading Method to calculate the final grade.

## Simplified Grading Method

If you allow your student to skip assignments, modify the time for learning disabilities, etc, the online grade book will not accurately calculate a final grade. Instead, use this simple method to give a completion grade of 90 for all Quizzes and Practice Sets. This way, you don't need to submit multiple grade change requests or manually record all the scores. All you need is the average of the four exam grades to put in the formula below. This new grade can be added to the Certificate.

Exam Average: Add the exam grades and divide by 4.
Final Grade = Exam Average (.40) + 54
For Example: If the exam average is a 70, it would be: 70 (.40) $+54=82$
To use a different completion grade for the Practice Sets and Quizzes, use this formula: Final Grade = Exam Average (.40) + Completion Grade (.60)

To calculate an exact score manually, record all the grades, then use this formula:
Exam Avg. (.40) + Quiz Avg. (.30) + Practice Set Avg. (.30)

You can also request a grade change for each assignment by using the "Request A Grade Change Form" on the Course Home page.

## Results of Former Students

## Why do results matter?

Shormann Math builds on a solid foundation of time-tested teaching methods, including the incremental development + continual review format pioneered by John Saxon(1923-1996). And not just Saxon's teaching methods, but his teaching thoughts as well, including his thought that "Results, not methodology, should be the basis of curriculum decisions."

One of the primary reasons John Saxon developed his math curriculum in the 1980s was because new ways of teaching math were not working. Math "educrats" at the time were promoting their untested "visions" of math teaching. But with 3 engineering degrees, John was a math user before he became a math teacher. Not only that, he was a test pilot. If anyone knew the extreme value and importance of testing a new product, it was John!

Results matter because they reveal whether or not a new product really works. And while statistics certainly don't reveal everything about a new product, they can certainly reveal many things. Most math curricula don't provide this level of detail on student performance. We are pleased to provide it for you.

## Overall performance

| Overall Average | $90.3 \%$ |
| :---: | :---: |
| Range(lowest to highest) | $81.0-97.9 \%$ |
| \% Students making an A(90\%+) | $67 \%$ |

Discussion: The average student in our beta test made an A in the class! Because each new Shormann Math course is beta-tested in a live online class setting, Dr. Shormann gets to know the students on more than just a "numbers only" basis. And we all know that God doesn't make clones, so the fact that not every student performed the same should not be a surprise. Natural talent definitely matters, but so do things like attitude and maturity. Dr. Shormann spends time during the video lectures encouraging students to develop fruits like patience and self-control (Galatians 5:22-23), as well as persevering with joy (James 1:2-3), and gratefulness (I Thessalonians 5:18).

## Practice Sets



Quarter
Discussion: You've probably never seen statistics on student performance in a math class before, which is why it is important to discuss the data! The decreasing trend over time is exactly what we expected. Two big factors are responsible for the trend: 1) There's more review of previously-learned concepts at the beginning, so it's easier and 2) student effort tends to decrease the closer you get to the end of the year!

What we had hoped for was a Practice Set average above $85 \%$, and that was achieved in all 4 quarters! $85 \%$ is a good cutoff for determining whether students are understanding, and retaining most of the concepts learned.

Note also the high first quarter average. Because Shormann Math is built on John Saxon's method of integrating geometry and algebra, students using Shormann Prealgebra, Saxon Math $8 / 7$ or Saxon Algebra $1 / 2$ will be most comfortable starting Shormann Math. However, not all beta-test students used Saxon previously, so the high first quarter average is a good indication that students who successfully completed any pre-algebra course should do just fine in Shormann Math.

## Weekly Quizzes



Discussion: Weekly Quizzes show a similar trend to the Practice Sets, challenging the students more as the year progressed. A score of 8 out of 10 or higher is a good indication of whether students understood the lessons covered that week. We are pleased that scores were well above this in all four quarters!

## Quarterly Exams



Discussion: Notice the Quarterly Exams do not follow the same trend as Practice Sets or Weekly Quizzes, with Quarter 1 having the lowest average. And this is where beta-testing a new product is so valuable. We realized that we were asking a lot for 9 th-grade level students, most of which had never taken a cumulative exam like this. The solution? Practice exams! Just like when learning a sport, a musical instrument, etc., good practice results in good performance. The beta-test students clearly performed best on first quarter Practice Sets and Quizzes. Most likely, if they were given practice exams prior to their quarterly exam 1 , this would have been their highest exam average. Now, all quarterly exams have two practice exams that students use to study for their actual exam.
$85 \%+$ is an indicator of good retention and understanding of concepts covered in a quarter. For all 4 quarters, student averages were at, or well above $85 \%$. Because of Shormann Math's format of continual review, we are basically asking students to be responsible for "all their math, all the time." These results show that, on average, students are responding very well!

## Scope \& Sequence <br> Shormann Algebra 1

## To jump to the sequence: Course Sequence

## Scope

| Number (Arithmetic) |
| :--- |
| Compare and order integers and positive rational numbers |
| Represent squares and square roots using geometric models |
| Use models to add, subtract, multiply and divide integers and connect the actions of algorithms |
| Simplify numerical expressions involving order of operations and exponents |
| Select and use appropriate operations to solve problems and justify the selections |
| History of number, where arithmetic symbols come from, other numeral systems |
| Operations with whole number exponents |
| Operations with fractional exponents |
| Operations with scientific notation |
| Logarithm means exponent |
| Subsets of Real Numbers |
| Consecutive Integer |
| The complex plane |
| Prime and numbers |
| Odd and even numbers |
| Factors and divisibility |
| Absolute value and order |
| Arithmetic word problems (including percent, ratio, and proportion) |
| Elementary number theory |
| Ratio (Fractions) |
| Define ratio, Greek's idea of comparison (rational), connect to other areas like language, unity/diversity |

> Greek's discovery of square root of 2 and problems they had
> History of pi, golden ratio, etc.
> Convert between fractions, decimals, percents and whole numbers

Represent multiplication and division involving fractions and decimals by using concrete models, pictures, words and numbers

Use addition, subtraction, multiplication and division to solve problems involving fractions and decimals
Use division to find rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio

Estimate and find solutions to application problems involving percent
Estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units.

Rational and irrational numbers
Applications from algebra and geometry
Rational and radical equations
Direct and inverse variation
Square roots and approximations

## Algebra

Word games like Sawyer's "bag of stones" trick to bridge algebra and arithmetic; history and etymology of algebra

Generate algebraic formulas involving conversions, perimeter, area, circumference, volume, and scaling
Given a situation, the student looks for patterns and represents generalization algebraically
Student uses the commutative, associative, distributive, properties to simplify algebraic expressions
Factoring Polynomials
Expanding Polynomials
Additions with algebraic expressions
Subtraction with algebraic expressions
Multiplication with algebraic expressions
Combined operations with algebraic expressions

| Operations with Variable exponents |
| :--- |
| Operations with combined operations |
| Use concrete models to solve equations and use symbols to record actions |
| Formulate a possible problem situation when given a simple equation |
| Use symbols to represent unknowns and variables |
| The student finds specific function values, simplifies polynomial expressions, transforms and solves |
| equations, factors as necessary in problem situations |
| Quadratic equations, standard form and factoring |
| Finding roots of quadratic equations |
| Quadratic formula |
| Absolute value equations |
| Creating systems of equations from word problems |
| Nonstandard algebraic equations and solutions |
| Modeling functions numerically |
| Modeling functions symbolically |
| Modeling functions verbally |
| Use properties to classify shapes including triangles, quadrilaterals, pentagons, and circles |
| Eunding domain and range from functions |
| Evaluating functions theorems, proofs |
| Substitution and simplifying algebraic expressions syllogisms |
| Using variables to express functional relationships |
| Elimination (systems of equations) |
| Geometry |


| Use properties to classify solids, including pyramids, cones, prisms and cylinders |
| :--- |
| Use critical attributes to define similarity |
| Sketch a solid when given the top, side, and front views |
| Make a net (two-dimensional model) of the surface area of a solid |
| Use geometric concepts and properties to solve problems in fields such as art and architecture |
| Make and verify conjectures about angles, lines, polygons, circles, and three-dimensional figures, <br> choosing from a variety of approaches such as coordinate, transformational, or axiomatic |
| Determine if the converse of a conditional statement is true or false |
| Construct and justify statements about geometric figures and their properties |
| Use inductive reasoning to formulate a conjecture |
| Use deductive reasoning to prove a statement |
| Use numeric and geometric patterns to make generalizations about geometric properties, including <br> properties of polygons, ratios in similar figures and solids, and angle relationships in polygons and circles <br> Use properties of transformations and their compositions to make connections between mathematics <br> and the real world in applications such as tesselations or fractals <br> Identify and apply patterns from right triangles to solve problems, including special triangles (45- 45-90, <br> 30-60-90) and triangles whose sides are Pythagorean triples <br> Describe and draw cross sections and other slices of three-dimensional objects <br> Use nets to represent and construct three dimensional objects <br> Use top, front, side and corner views of three-dimensional objects to create accurate and complete <br> representations and solve problems <br> Properties of triangles, circles and rectangles proofs <br> Special properties of isosceles, equilateral, and right triangles <br> Concept of proof and proof technique |


| Descartes and Fermat and history of analytical geometry |
| :--- |
| Rectangular Coordinate System |
| Locate and name points on a coordinate plane using ordered pairs of integers |
| Finding the slope of a line |
| Linear equations |
| Identify and sketch the general forms of linear (y=x) parent functions |
| Parallel and perpendicular lines |
| Graphing systems of linear equations |
| Functions and relations |
| Modeling functions graphically |
| Finding domain and range from graphs |
| Graphs and intercepts |
| Graphing functions |
| Describe independent (input) and dependent (output) quantities in functional relationships |
| Use data sets to determine functional (systematic) relationships between quantities |
| Describe functional relationships for given problem situations and write equations or inequalities to <br> answer questions arising from the situations <br> situations |
| Use combinations of algebraic, tabular, graphical, or verbal descriptions of linear functions |
| descriptions, equations, and inequalities |
| Interpret and makes inferences from functional relationships |
| For a variety of situations, the identify mathematical domains and ranges and determine reasonable <br> domain and range values for given situations <br> models, predicts, and makes decisions and critical judgments <br> Interpret situations in terms of given graphs or create situations that fit graphs <br> In solving problems, the student collects and organizes data, makes and interprets scatterplots, and |

## Analyze situations involving linear functions and formulate linear equations and inequalities to solve a problem

Investigate methods for solving linear equations and inequalities using concrete models, graphs, and the properties of equality, select a method, and solve the equations and inequalities

For given contexts, interpret and determine the reasonableness of solutions to linear equations and inequalities

Analyze situations and formulates systems of linear equations to solve problems
Solve systems of linear equations using concrete models, graphs, tables, and algebraic methods
For given contexts, interpret and determine the reasonableness of solutions to systems of linear equations

Use one and two-dimensional coordinate systems to represent points, lines, line segments, and figures
Use slopes and equations of lines to investigate geometric relationships, including parallel lines, perpendicular lines, and special segments of triangles and other polygons.

Identify graphic and symbolic forms of the following nonlinear functions: absolute value, quadratic, square root, exponential, cubic, reciprocal

## Measurement

The Lord abhors dishonest weights and measures (Proverbs 20:10, etc.)
Solve application problems involving estimation and measurement. Estimate measurements and solve application problems involving length, area, and volume

Volume of box, cube, cylinder, prism, sphere
Total surface area
Surface area and volume of more complex shapes like pipes and washers
Length conversions
Area conversions
Volume conversions
Foreign currency conversions
Gas law problems
Evaluating scientific formulas
Density as a direct relationship
Evaluating financial formulas (interest rate, savings and debt)

## Trigonometry

Distance and midpoint formulas
Right angle relationships
Sine, cosine, tangent
Pythagorean theorem

## Polar coordinates

Vectors and parallelogram law (Whitehead)
Visualize location of resultant vector by applying Parallelogram Law
Periodicity
Unit circle

## Calculus

Archimedes, Newton, Euler and Leibniz, history of calculus
Faster/slower, speed and rate, acceleration
Limits, tangent
Slope and area under a curve, connecting calculus to algebra/geometry fundamentals
Students develop the concept of slope as rate of change and determine slopes from graphs, tables, and algebraic representations

Interpret the meaning of slope and intercepts in situations using data, symbolic representations, or graphs

Investigate, describe, and predict the effects of changes in $m$ and $b$ on the graph $y=m x+b$
Graph and write equations of lines given characteristics such as two points, a point and a slope, or a slope and $y$-intercept

Determine the intercepts of linear functions from graphs, tables, and algebraic representations
Interpret and predict the effects of changing slope and y-intercept in applied situations
Relate direct variation to linear functions and solves problems involving proportional change
Derivatives of $f(x)=x \wedge 2$
Integrals I (summing area under curve)
Ratios as rates

## Statistics

Gauss and bell curve
Computation of probabilities of simple and compound events
Find approximate probability of a compound event through experimentation
Select and use an appropriate representation for presenting collected data and justify the selection
Make inferences and convincing arguments based on an analysis of given or collected data
Describe a set of data using mean, median, mode, and range
Choose among mean, median, mode, or range to describe a set of data and justify the choice for a particular solution

Data interpretation and representation: tables; bar, line, circle graphs; pie charts, scatterplots, histograms, with and without margin of error

Chi square
Linear regression
Using Punnett squares
Hardy-Weinberg equilibrium

## Computer Math

Binary system, connection to computer screen and pixels
Difference between discrete and continuous and analogy to one and many
Describe relationship between terms in a sequence and their positions in sequence
Select and use appropriate representations for presenting collected data and justify the selection

## Sequences

## Series

$2 \times 2$ matrices, operations

## Shormann Algebra 1 with Integrated Geometry Course Sequence

Lesson 1 Numbers I: What is Mathematics? - Mathematical Periods in History Thinking About Numbers

Lesson 2 Numbers II: Origins - Types of numbers, number lines - Arithmetic Review
Lesson 3 Numbers III: Operations - Absolute Value - Order of operations and exponents
Lesson 4 Ratios I: History - Rational and Irrational Numbers - Operations With Fractions and Decimals

## Week 1 Quiz

Lesson 5 Ratios II: Fraction/Decimal/Percent - Operations With Fractions and Decimals
Lesson 6 Ratios III: Rate - Similarity and Scaling
Lesson 7 Algebra I: What is Algebra? - Basic Algebra Rules
Lesson 8 Algebra II: Word Problems - Simplifying Algebraic Expressions

## Week 2 Quiz

Lesson 9 Geometry I: Euclid, Postulates, and Deductive Reasoning - Similarity and Congruence

Lesson 10 Geometry II: Inductive Reasoning, Construction - Deductive Reasoning and Proofs

Lesson 11 Geometry III: More Geometric Properties, Transformations - Logic
Lesson 12 Geometry IV: Pythagorean Theorem - Application of Other Rules and Definitions

## Week 3 Quiz

Lesson 13 Geometry V: Solids, Nets - Geometry in Art and Architecture, Nature
Lesson 14 Analytical Geometry I: Foundations of Analytical Geometry - The Coordinate Plane

Lesson 15 Analytical Geometry II: Functions (without graphing) - Domain and Range
Lesson 16 Analytical Geometry III: Functions with graphing

## Week 4 Quiz

Lesson 17 Analytical Geometry IV: More on Linear Functions - Systems of Equations
Lesson 18 Measurement: Unit conversions - Perimeter, Area, and Volume
Lesson 19 Trigonometry: Trigonometry Basics (Calculator required)

## Week 5 Quiz

Lesson 20 Calculus I: What is Calculus? - Infinitesimals and Limits
Lesson 21 Calculus II: The Derivative - Calculus and the Trinity
Lesson 22 Calculus III: More on Derivatives and Tangent Lines - Applications - The Integral

## Week 6 Quiz

Lesson 23 Statistics I: Collecting Data, Making Tables and Histograms - Mean, Median, Mode, Range

Lesson 24 Statistics II: Probability, Simple and Compound Events - Linear Regression and Best Fit

Lesson 25 Computer Math: Pixels, Bits, and Binary Numeral System - Sequences and Series - Matrices

## Week 7 Quiz

Exam 1, Week 8: Practice Exam 1.1 \& 1.2, Quarterly Exam 1
Lesson 26 Arithmetic Word Problems: Word Problems and Data from a Chart
Lesson 27 Decimal and Percent Word Problems: Decimal Word Problems - Percent Word Problems

Lesson 28 Proportion Word Problems: Review: Lesson 6B
Lesson 29 Standardized Test Questions(ACT, SAT, CLEP): Review: Lessons 2-25
Week 9 Quiz
Lesson 30 Operations With Whole Numbers and Exponents
Lesson 31 Operations With Fractional Exponents
Lesson 32 Operations With Variable Exponents: Review: Lesson 7, 30, 31

Lesson 33 Operations With Scientific Notation: Converting to and from Scientific Notation

## Week 10 Quiz

Lesson 34 Power Rule, Product of Square Roots Rule: Power Rule - Product of Square Roots Rule

Lesson 35 Addition of Like Terms: Review: Lesson 7 and 8 on simplifying algebraic expressions

Lesson 36 Subtraction of Like Terms: Review: Lesson 7 and 8 on simplifying algebraic expressions

Lesson 37 Multiplication With Algebraic Expressions: Expanding

## Week 11 Quiz

Lesson 38 Combined Operations With Algebraic Expressions
Lesson 39 Simplifying Algebraic Fractions: Canceling and Factoring - Simplifying Complex Fractions

Lesson 40 Circles and Angles - Radical Expressions and Addition of Like Terms
Lesson 41 Area, Surface Area: Area of Shaded Regions and Sectors

## Week 12 Quiz

Lesson 42 Volume of Right Solids with Holes, Total Surface Area:
Lesson 43 Special Right Triangles, Pythagorean Theorem Applications
Lesson 44 Length Conversions, Scientific Notation on a Calculator
Lesson 45 Area and Volume Conversions: Area Conversions - Volume Conversions

## Week 13 Quiz

Lesson 46 Solving Multivariable Equations: Review: Mainly lessons 7, 8, 37, and 39A
Lesson 47 Solving Rational Equations: Review: Lesson 4 on least common multiple (LCM), Lessons 7, 46

Lesson 48 Creating Linear Equations from Two Points and from Word Problems
Lesson 49 Parallel and Perpendicular Lines: Parallel Lines - Perpendicular Lines
Lesson 50 Expanding Squared Binomials, Euler Word Problems

## Week 14 Quiz

Exam 2, Week 15: Practice Exam 2.1 \& 2.2, Quarterly Exam 2
Lesson 51 Factoring Trinomials: Review: Lessons 8, 39, 50
Lesson 52 Modeling Functions through Graphical Representation - Functions and Relations

Lesson 53 Numerical Applications with Functions - Numerical Representation
Lesson 54 Modeling Functions Symbolically: Review: Lessons 15, 16, 52

## Week 16 Quiz

Lesson 55 Modeling Functions Verbally: Review: Lessons 15, 16, 48, 52, 54
Lesson 56 The Algebra of Functions: Review: Lessons 15, 16, 52-55
Lesson 57 Horizontal and Vertical Shifts in Functions, Domain and Range from Graphs
Lesson 58 Distance Between Two Points, More on Simplifying Radical Expressions

## Week 17 Quiz

Lesson 59 Inverse Trigonometric Functions - Polar Coordinates and Vectors
Lesson 60 Reflections of Functions, Evaluating Scientific Formulas
Lesson 61 Solving Systems of Equations from Graphs, Finding Optimums from Graphs
Lesson 62 More About Simplifying Complex Fractions: Review Lesson 39

## Week 18 Quiz

Lesson 63 Simple Probability, Conditional Probability: Simple Probability - Conditional Probability

Lesson 64 Using Substitution to Solve Systems of Equations: Review: Lesson 7, 15, 17, 56, 61.

Lesson 65 Limits, Part I: Review: Lesson 20.
Lesson 66 Circle Properties II, Concept of Proof and Proof Technique

## Week 19 Quiz

Lesson 67 Proving Euclid's Proposition 2: Review: Lessons 9, 10, and 66.
Lesson 68 Triangle Congruency; Triangle Proofs: Triangle Congruency - Triangle Proofs

Lesson 69 Interest Rate, Savings, and Debt: What Does the Bible Say About Savings and Debt?

## Week 20 Quiz

Lesson 70 Using Elimination to Solve Systems of Equations: Review: Lessons 7, 61, 64
Lesson 71 More Rational and Radical Equations: Radical Equations - More on Rational Equations

Lesson 72 Direct and Inverse Variation: Direct Variation - Inverse Variation

## Week 21 Quiz

Lesson 73 Nonstandard Solutions to Algebraic Equations: Review: Lessons 7, 64, 70
Lesson 74 Consecutive Integer Word Problems: Consecutive Integer Word Problems
Lesson 75 Quadratic Equations: Standard Form and Factoring: Standard Form of Quadratic Equations

## Week 22 Quiz

Exam 3, Week 23: Practice Exam 3.1 \& 3.2, Quarterly Exam 3
Lesson 76 Finding Roots of Quadratic Equations: Review: Lesson 75
Lesson 77 Punnett Squares; Hardy-Weinberg Equation: Punnett Squares - The Hardy-Weinberg Equation

Lesson 78 The Parallelogram Law and Resultant Vectors: Review: Lesson 59
Lesson 79 Logarithm Means Exponent: History of Logarithms - Logarithm Basics
Lesson 80 Transversals and Right Triangles; Logarithms on a Calculator

## Week 24 Quiz

Lesson 81 Graphs and Intercepts: Graphs and Intercepts of Linear Functions - Nonlinear Functions

Lesson 82 Creating Systems of Equations from Word Problems: Review: Lessons 17, 64, 70

Lesson 83 Word Problems with Two Statements of Equality: Review: Lesson 82
Lesson 84 Uniform Motion Word Problems: Review: Lessons 6, 20, 60

## Week 25 Quiz

Lesson 85 Limits, Part II: Rejecting Infinitesimals: A Fool's Errand - Infinity as a Limit
Lesson 86 Gas Law Problems: Review: Lesson 60
Lesson 87 Data Interpretation and Representation: Review: Lessons 17, 23, 24, 26
Lesson 88 Sequences: Review: Lesson 25

## Week 26 Quiz

Lesson 89 Periodicity: The Unit Circle - Vectors and Sign Changes
Lesson 90 Series: Arithmetic Series - Geometric Series
Lesson 91 Completing the Square: Review: Lessons 51, 75, 76
Lesson 92 The Quadratic Formula: Review: Lesson 91

## Week 27 Quiz

Lesson 93 Integrals and Infinitesimals: Review: Lessons 20, 21, 22, 25, 90
Lesson 94 Linear Regression: Review: Lessons 16, 17, 24, 48
Lesson 95 The Complex Plane: Graphing Complex Numbers - Quadratic Equations and Complex Numbers

Lesson 96 Uniform Motion and Unequal Distances: Review: Lesson 84

## Week 28 Quiz

Lesson 97 Absolute Value Equations: Review: Lessons 3, 52, 73, 81
Lesson 98 Construction, Part I: Review: Lessons 10, 67
Lesson 99 Absolute Value Inequalities: Review: Lessons 17, 97
Lesson 100 Chi Square: Review: Lessons 23, 24, 77, 94
Week 29 Quiz
Exam 4, Week 30: Practice Exam 4.1 \& 4.2, Quarterly Exam 4

## Shormann Algebra 1 <br> Assignment Chart

| Lesson |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set |  | Corrections |
| 2 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set | $\square$ | Corrections |
| 3 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 4 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| Quiz 1 | $\square$ | Study | $\square$ | Take Quiz |  | Corrections |  |  |
| 5 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 6 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 7 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 8 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| Quiz 2 | $\square$ | Study | $\square$ | Take Quiz | $\square$ | Corrections |  |  |
| 9 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 10 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 11 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 12 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| Quiz 3 | $\square$ | Study | - | Take Quiz | $\square$ | Corrections |  |  |
| 13 | $\square$ | Reading | - | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 14 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 15 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 16 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| Quiz 4 | $\square$ | Study | $\square$ | Take Quiz | $\square$ | Corrections |  |  |
| 17 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 18 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 19 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| Quiz 5 | $\square$ | Study | - | Take Quiz | $\square$ | Corrections |  |  |
| 20 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |
| 21 | $\square$ | Reading | $\square$ | Lecture | $\square$ | Practice Set | $\square$ | Corrections |


| Lesson |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | $\square$ | Reading |  | Lecture |  | Practice Set |  | Corrections |
| Quiz 6 | $\square$ | Study |  | Take Quiz |  | Corrections |  |  |
| 23 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| 24 | $\square$ | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |
| 25 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| Quiz 7 | $\square$ | Study |  | Take Quiz |  | Corrections |  |  |
| Practice <br> Exam 1.1 | $\square$ | Study |  | Practice Exam 1.1 |  | Corrections |  |  |
| Practice <br> Exam 1.2 | $\square$ | Study |  | Practice Exam 1.2 |  | Corrections |  |  |
| Exam 1 <br> (Attempt 1) | $\square$ | Study |  | Take Exam 1 |  | Corrections |  |  |
| Exam 1 (Attempt 2) | $\square$ | Study |  | Take Exam 1 |  | Corrections |  |  |
| 26 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| 27 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| 28 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| 29 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| Quiz 9 | $\square$ | Study |  | Take Quiz |  | Corrections |  |  |
| 30 | $\square$ | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |
| 31 | $\square$ | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |
| 32 | $\square$ | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |
| 33 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| Quiz 10 | $\square$ | Study |  | Take Quiz |  | Corrections |  |  |
| 34 | $\square$ | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |
| 35 | $\square$ | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |
| 36 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| 37 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| Quiz 11 | $\square$ | Study |  | Take Quiz |  | Corrections |  |  |
| 38 | $\square$ | Reading |  | Lecture |  | Practice Set | - | Corrections |
| 39 |  | Reading |  | Lecture |  | Practice Set | $\square$ | Corrections |


| Lesson |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 40 | - Reading | - Lecture | - Practice Set | - Corrections |
| 41 | - Reading | - Lecture | - Practice Set | - Corrections |
| Quiz 12 | - Study | - Take Quiz | - Corrections |  |
| 42 | - Reading | - Lecture | - Practice Set | - Corrections |
| 43 | - Reading | - Lecture | - Practice Set | - Corrections |
| 44 | - Reading | - Lecture | - Practice Set | - Corrections |
| 45 | - Reading | - Lecture | - Practice Set | - Corrections |
| Quiz 13 | - Study | - Take Quiz | - Corrections |  |
| 46 | - Reading | - Lecture | - Practice Set | - Corrections |
| 47 | - Reading | - Lecture | - Practice Set | - Corrections |
| 48 | - Reading | - Lecture | - Practice Set | - Corrections |
| 49 | - Reading | - Lecture | - Practice Set | - Corrections |
| 50 | - Reading | - Lecture | - Practice Set | - Corrections |
| Quiz 14 | - Study | - Take Quiz | - Corrections |  |
| Practice <br> Exam 2.1 | - Study | - Practice Exam 2.1 | - Corrections |  |
| Practice <br> Exam 2.2 | - Study | - Practice Exam 2.2 | - Corrections |  |
| Exam 2 <br> (Attempt 1) | - Study | - Take Exam 2 | - Corrections |  |
| Exam 2 <br> (Attempt 2) | - Study | - Take Exam 2 | - Corrections |  |
| 51 | - Reading | - Lecture | - Practice Set | - Corrections |
| 52 | - Reading | - Lecture | - Practice Set | - Corrections |
| 53 | - Reading | - Lecture | - Practice Set | - Corrections |
| 54 | - Reading | - Lecture | - Practice Set | - Corrections |
| Quiz 16 | - Study | - Take Quiz | - Corrections |  |
| 55 | - Reading | - Lecture | - Practice Set | - Corrections |
| 56 | - Reading | - Lecture | - Practice Set | - Corrections |
| 57 | - Reading | - Lecture | - Practice Set | - Corrections |
| 58 | - Reading | - Lecture | - Practice Set | - Corrections |


| Lesson |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quiz 17 |  | Study |  | Take Quiz |  | Corrections |  |
| 59 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set | - Corrections |
| 60 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set | - Corrections |
| 61 |  | Reading | - | Lecture |  | Practice Set | - Corrections |
| 62 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| Quiz 18 | $\square$ | Study | - | Take Quiz |  | Corrections |  |
| 63 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 64 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 65 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 66 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| Quiz 19 | $\square$ | Study | - | Take Quiz |  | Corrections |  |
| 67 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 68 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 69 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| Quiz 20 | $\square$ | Study | - | Take Quiz |  | Corrections |  |
| 70 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 71 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| 72 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set | - Corrections |
| Quiz 21 | $\square$ | Study | - | Take Quiz |  | Corrections |  |
| 73 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set | - Corrections |
| 74 | $\square$ | Reading | $\square$ | Lecture |  | Practice Set | - Corrections |
| 75 | $\square$ | Reading | - | Lecture |  | Practice Set | - Corrections |
| Quiz 22 | $\square$ | Study | $\square$ | Take Quiz |  | Corrections |  |
| Practice <br> Exam 3.1 | $\square$ | Study | - | Practice Exam <br> 3.1 |  | Corrections |  |
| Practice <br> Exam 3.2 | $\square$ | Study | - | Practice Exam 3.2 |  | Corrections |  |
| Exam 3 <br> (Attempt 1) | $\square$ | Study |  | Take Exam 3 |  | Corrections |  |
| Exam 3 <br> (Attempt 2) | $\square$ | Study |  | Take Exam 3 |  | Corrections |  |



| Lesson |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- |
| 100 | $\square$ Reading | $\square$ Lecture | $\square$ Practice Set | $\square$ Corrections |
| Quiz 29 | $\square$ Study | $\square$ Take Quiz | $\square$ Corrections |  |
| Practice <br> Exam 4.1 | $\square$ Study | $\square$ Practice Exam |  |  |
| Practice <br> Exam 4.2 | $\square$ Study | $\square$ Corrections |  |  |
| Exam 4 <br> (Attempt 1) | $\square$ Study | $\square$ Take Exam 4 | $\square$ Corrections |  |
| Exam 4 <br> (Attempt 2) | $\square$ Study | $\square$ Take Exam 4 | $\square$ Corrections |  |

