2026-27 LIVE ALGEBRA 1 CLASS SYLLABUS

Tuesdays: 1 PM - 2 PM Central Time

Can I start working on my course before class starts?

IMPORTANT: Prep Course for Shormann Algebra 1

Orientation:
2 weeks before class starts, parents will receive an orientation video that explains all the information in this syllabus, as well as how to use the eLearning course & Webex. To ensure you receive all emails, please add support@diveintomath.zendesk.com to your contacts in your email account.

Required Supplies:

- **Curriculum:** Purchase the self-paced **eLearning Shormann Algebra 1 with Integrated Geometry**. While it can be purchased anytime, we recommend at least three weeks before classes start. If you want to start working on the course earlier, please read the article at the top of this page.

- 1-inch 3-ring binder with dividers and college rule or typing paper (typing paper is preferred), mechanical pencils and erasers

- Headphones or speaker (optional: microphone or you can message instead)

- Drawing Compass and Ruler or GeoGebra App (recommended)

- **Calculator:** Learn More: Dr Shormann's Calculator Recommendations

- **PDF Binder:** You need to be able to convert your handwritten homework into a digital .pdf format with all pages in one PDF. **I recommend an app called TurboScan (~$10). You can use others but we only provide support for TurboScan.** It can be purchased on the Apple App Store as well as for Android devices. Click here for step-by-step instructions on using the app.

Assignments & Homework: The eLearning Course:

The eLearning course is where students complete daily assignments (video lessons and homework) and take quizzes and exams. Please read the **Teacher's Guide** for more information on using the Shormann eLearning course.

Sample weekly schedule for Algebra 1:
Day 1: Do 1 lesson (1.5 hr).
Day 2: Do 1 lesson (1.5 hr).
Day 3: Do 1 lesson (1.5 hr).
Day 4: Do 1 lesson (1.5 hr)
Day 5: Online Class Meeting. Upload Homework and study for the quiz.

Tips for Success

- **Spread assignments out over at least 4 days.** Doing all the homework in two or three days will decrease fluency.

- **Limit math to an hour and half to two hours per day.** If more time is needed, work on math another 1-2 days.

- **Print and follow the steps on the Practice Set Instructions** (linked on the eLearning home page and Teacher's Guide).

- **Email me right away i**f you feel overwhelmed or can't do your work. The longer you wait the further behind you will get and the longer it will take to catch up.

Format for Homework & Notes:

○ Use typing paper.

○ Fold your paper in half, forming two columns, and work problems vertically in both columns, front and back.

○ For problems in the Practice Set, grade your handwritten work with a red pen, and mark each problem with an X if incorrect or √ if correct.

○ Rework all missed problems in red, writing the correct solution next to the missed problem.

○ Put your name and lesson number on the top right corner of each page. Show your work. If you don't show work, you will not receive full credit.

Turn in Homework & Lecture Notes Before Class Starts
Your name and assignment number should be on the top right corner of the front page. Remember these things when uploading your homework:

1) **PDF is the only acceptable file format.** All homework for one week must be combined into one file, or "PDF binder". Not a "zip" file but a PDF file.

2) **don't exceed 5 MB per file.** In other words, the single PDF file containing all your work for that week must not exceed 5 MB in size. Resize your files if necessary.

3) See PDF binder in required supplies on page 3.

Live Class Meetings:Webex

We use Webex for live class meetings. Each week, you will receive a meeting invitation in your email, which will have a link to attend that week's class.

Class time will involve reviewing the week's lessons, taking a quiz and discussing the results, and answering questions you have. You can also email me during the week with questions at drshormann@gmail.com.

You can ask question via chat or voice (headset with microphone required). Students use the text area to "chat" publicly with other students. Conversations will end when class begins. Any inappropriate conversations will not be tolerated and will be reported to your parents. If you have a question about a math problem or concept, you can send it to me as either a public or private chat message.

Grading

At the end of the year, the two lowest homework and quiz grades will be dropped. You will receive an evaluation after every quarterly exam. You can check your grade any time online. You will receive a certificate of completion if your average is 75% or greater.

- Homework is worth 20%.

- Class participation is worth 5%, and is based primarily off attendance, plus an obvious effort to respond when questions are asked.

- The four quarterly exams are worth 40%, and the in-class quizzes worth 35%.

Exams

If you have been completing your work at home **with integrity**, making 80% or better on most quizzes, and you follow the [How to Study for Exams](), you should do well on the quarterly exams.

Absences:

- Class Meetings are recorded.

- To allow for absences, at the end of the year I drop the two lowest weekly quiz grades and two lowest homework upload grades. If you are absent two times or fewer, then the work you didn't turn in will not affect your grade. Of course, you still need to do the work or you will struggle in the remainder of the course.

- I WILL NOT ACCEPT LATE WORK (but I will accept it early if you know you will be missing class on a certain date).

- PLEASE DO NOT ASK TO TURN WORK IN LATE. If you have to miss class more than two times and you are concerned about it affecting your grade, then please talk to me and we will work something out.

Conduct:

A good student will be attentive while I am talking, will come to class prepared and on time, and will treat everyone with respect and kindness. They will also meet the participation requirements described below. Also, do your homework with integrity! If your homework is consistently perfect, but you consistently fail the weekly quizzes, that is almost always a sign of cheating on homework, and you will be asked to drop the class. Strive to be a good student!

Participation:

Getting all your schoolwork done each week can be challenging, but I won't be doing you any favors by letting you get by with little or no homework completed for multiple weeks. At a minimum, each week you must turn in 2 homework assignments and complete the in-class quiz. If, for any 3-week period, you fail to meet the minimum requirement, and/or show little effort to complete more than the minimum requirement, you will be asked to drop the class.

SAT/ACT tests: Together, Shormann Math Algebra 1 and 2 cover all the content on **both** the ACT and SAT exams. Just like you take practice exams to help you prepare for the Shormann Math quarterly exams, we recommend that, prior to your SAT or ACT exam, you use some type of prep course containing at least 2 practice exams. Learn more about how to prepare for PSAT, SAT, and ACT here.

How to read the Assignment Chart (below): The chart is set up as a weekly schedule that shows you what work is due each week. Make sure you complete everything in the "Lessons Due" column **BEFORE** you come to class on the Tuesday date listed. Make special note of the 4 quarterly exam dates. On these weeks, students study for their quarterly exam and take the exam during class. Start your new lessons the day after class.

2026-27 Weekly Assignment Chart: Live Algebra 1

HAVE YOUR MATH BINDER, CALCULATOR, AND A PENCIL FOR EVERY CLASS!

Week #	Class Date	Lessons Due Before Class
1	Aug. 18	Lessons 1-4
2	Aug. 25	Lessons 5-8
3	Sep. 1	Lessons 9-12
No Class - Labor Day	Sep. 8	-
4	Sep. 15	Lessons 13-16
5	Sep. 22	Lessons 17-19
6	Sep. 29	Lessons 20-22
7	Oct. 6	Lessons 23-25
8	Oct. 13	Study for 1st Quarter Exam, take exam during class.
9	Oct. 20	Lessons 26-29
10	Oct. 27	Lessons 30-33
11	Nov. 3	Lessons 34-37
12	Nov. 10	Lessons 38-41
13	Nov. 17	Lesson 42-45
No Class: Thanksgiving Break	Nov. 24	-
14	Dec. 1	Lesson 46-50
15	Dec. 8	Study for 2nd Quarter Exam, take exam during class.
No Class - Christmas	Dec. 15, 22, 29, Jan 5	-
16	Jan. 12	Lessons 51-54
17	Jan. 19	Lessons 55-58
18	Jan. 26	Lessons 59-62
19	Feb. 2	Lessons 63-66
NO Class - Winter Break	Feb. 9	-
20	Feb. 16	Lessons 67-69
21	Feb. 23	Lessons 70-72
22	Mar. 2	Lessons 73-75
23	Mar. 9	Study for 3rd Quarter Exam, take exam during class.
No Class - Spring Break	Mar. 16	-
24	Mar. 23	Lessons 76-80
25	Mar. 30	Lessons 81-84
26	Apr. 6	Lessons 85-88
27	Apr. 13	Lessons 89-92
28	April 20	Lessons 93-96
29	April 27	Lessons 97-100
30	May 4	Study for 4th Quarter Exam, take exam during class.

LIVE Class 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   What is Algebra? - Basic Algebra Rules

Lesson 8   Algebra 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   Pre-Algebra Based Introductory Calculus: What is Calculus? - Infinitesimals and Limits

Lesson 21   Pre-Algebra Based Introductory Calculus: Calculus and the Trinity

Lesson 22   Pre-Algebra Based Introductory Calculus: 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

Week 8:   Study for Exam, Practice Tests 1 & 2, Quarterly Exam 2

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

Week 15:   Study for Exam, Practice Tests 1 & 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

Week 23:   Study for Exam, Practice Tests 1 & 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

Week 30:   Study for Exam, Practice Tests 1 & 2, Quarterly Exam 4