Aim Academy Online

ALGEBRA 1 REVIEW SYLLABUS

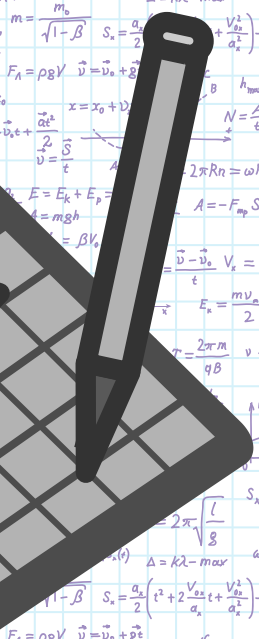
Mrs. Michele Diggins
mdiggins@aimacademy.online

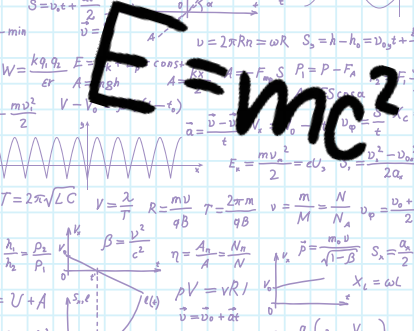
Required Materials:

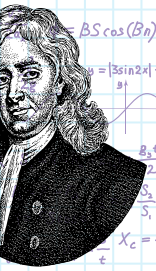
- Graphing Calculator - TI-83 or TI-84 (any version will work)
- Scanner or smart phone
- Computer (not tablet) with Web cam, sound card, and microphone

Course Description

This course will serve as a way to brush up on and develop better algebraic skills learned in pre-algebra. It is designed to help students boost confidence and enhance their current understanding of essential concepts heading into the Algebra 1 level.







EVALUATION & GRADING

Grading

- Final grade will be calculated by point totals for each assignment.
- PASS = greater than 69% of total course points.

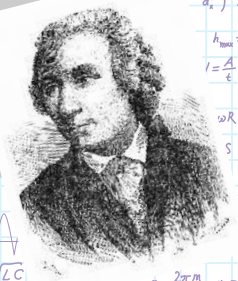
Please note that students who end the course with a PASS will be awarded a certificate of completion.

Assignments

Videos: Daily videos are required for viewing and note-taking. Each video also includes questions to be answered by the student with answers submitted on the Canvas platform.
Homework: Daily work includes exercises in the Delta Math app and/or in Canvas. These assignments may be attempted as many times as needed to achieve a desired score.
Reviews: Each weekly module will include one review assignment. These are completed through Canvas, however, handwritten work is still expected. At the end of each, there is a place to upload that work.

COURSE OBJECTIVES

- Identify and apply Associative, Commutative, Transitive, Opposite, Identity, Inverse, Zero, and Equality Properties to expressions
- Solve and check equations, inequalities, and systems of equations
- Find equivalent forms of equations
- Determine if linear systems have one solution, no solution, or infinite solutions
- Find and use slope and properties of slope
- Solve quadratic equations using various methods
- Graph and interpret the graphs of quadratic equations
- Find and use properties of quadratic functions
- Graph, evaluate, and compare exponential growth or decay
- Calculate range, mean absolute deviation, and spread of a distribution
- Create a scatterplot from a table or expression
- Use chi-square statistic to determine whether or not statistics support a conclusion
- Calculate relative frequencies and probabilities for a finite number of equally likely outcomes
- Understand the Multiplication Counting Principle
- Determine numbers of permutations
- Simplify and evaluate products, quotients, and powers of powers
- Simplify fractional powers
- Perform basic operations on polynomials
- Find GCF of polynomials
- Classify polynomials by degree and number of terms



COURSE SCHEDULE

Week 1

Real Numbers

Week 2

Real Numbers (continued)

Linear Equations

Week 3

Linear Equations (continued)

Week 4

Quadratic Equations

Week 5

Exponential Equations

Week 6

Polynomials

Week 7

Polynomials (continued)

Probability

"THE ONLY WAY TO LEARN MATHEMATICS IS TO DO MATHEMATICS." -PAUL HALMOS