Aim Academy Online

ALGEBRA 1
REVIEW
SYLLABUS

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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 Algebra 1. It is designed to help students boost confidence and enhance their current understanding of essential concepts heading into Algebra 2 level.
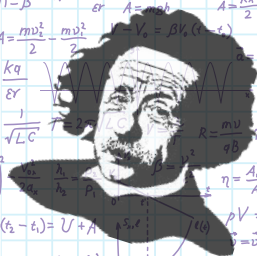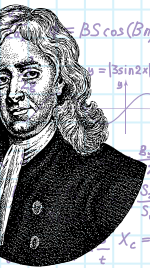
EVALUATION & GRADING

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.

Participation

Be prepared: Come to class ready to discuss the topics of the week, to ask questions about problems you do not understand, and to help others if they need it.

Be respectful: Have your webcam turned on and noise in the background turned off. Pay close attention to those speaking in class, including fellow students.

Be responsible: Your benefit from this class will depend on your diligence to complete the assignments in a timely manner.
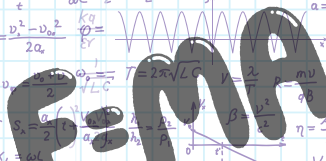
COURSE OBJECTIVES

- 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
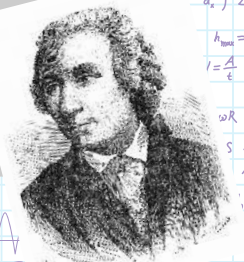
COURSE SCHEDULE

Week 1
Real Numbers
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Week 2
Real Numbers (continued)
Linear Equations
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Week 3
Linear Equations (continued)
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Week 4
Quadratic Equations
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Week 5
Exponential Equations
....
Week 6
Polynomials
....
Week 7
Polynomials (continued)
Probability
....
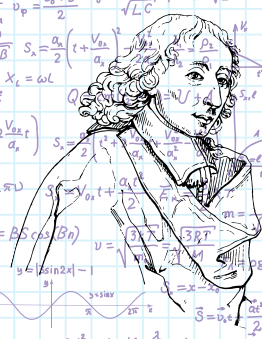
"THE ONLY WAY TO LEARN MATHEMATICS IS TO
DO MATHEMATICS." –PAUL HALMOS