Course Overview
Adventures in Algebra - Road 1 is designed to improve student understanding, achievement and interaction with basic mathematical concepts integral in the foundational stages of successful manipulation of algebraic expressions.

Students who participate in Road 1 will benefit by developing their skills in number theory, operations of arithmetic, evaluating expressions, solving linear equations, operations with integers and rational numbers and graphing on the coordinate plane.

Course Description:
Symbolic reasoning and calculations with symbols are central to Algebra. Through the study of Algebra preparation, a student develops an understanding of the symbolic language of mathematics and the sciences. In addition, algebraic skills and concepts are developed and used in a wide variety of problem-solving situations.

Course Goals and Objectives:
Correlates with the Common Core State Math Standards

1. Ratios and Proportional Relationships
   • Understand ratio concepts and use ratio reasoning to solve problems.

2. The Number System
   • Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
   • Multiply and divide multi-digit numbers and find common factors and multiples.
   • Apply and extend previous understandings of numbers to the system of rational numbers.

3. Expressions and Equations
   • Apply and extend previous understandings of arithmetic to algebraic expressions.
   • Reason about and solve one-variable equations and inequalities.
   • Represent and analyze quantitative relationships between dependent and independent variables.

4. Geometry
   • Solve real-world and mathematical problems involving area, surface area, and volume.

5. Statistics and Probability
   • Develop understanding of statistical variability.
Summarize and describe distributions.

Course Outline:

Week One
Greetings, Introduction, and Diagnostic Test.
Order of Operations with Whole Numbers
Integers
Identify Properties

Week Two
Fractions & Decimals
Comparing & Ordering
Problem Solving (addition, subtraction, multiplication & division)

Week Three
Percent
Unit cost
Proportional relationships
Problem Solving & Real-world Application

Week Four
The Coordinate Plane
Graphing

Week Five
Data Analysis
Mean, median and mode
Reading & Making bar graphs

Student Assessment:

There will be no letter grades assigned in this course. In place of letter grades, a developmental level will be assigned based upon the stated course objectives throughout the program. Students will receive a final assessment of: beginning, emerging, developing, capable, experienced, or exceptional.

Student Supplies:
Students are to bring to class each day the following items:
1. 3-ring notebook binder
2. lined paper
3. graph paper
4. pencils
5. colored pencils
6. two red pens
7. ruler
8. pencil sharpener with a barrel to collect shavings
9. basic calculator (Expensive scientific calculators not needed.)

Classroom Behavior:
The student is expected to demonstrate mature, polite behavior and extend courtesy to everyone at all times:

1. Actively participate, and respectful verbal and nonverbal interaction with all opinions must be shown at all times.
2. Since differing views will be expressed, the teacher and the student(s) will mutually maintain a safe environment for courteous dialogue.
3. Respect is to be shown for all CSUN property.
4. No food or beverages will be permitted in the classroom. Snacks must be eaten outside between the designated breaks.
5. Warnings for behavior / discipline problems will be given once. Any further problems will result in a phone call to the parent(s) or guardian(s) and possible dismissal from the program.

SAEP Electronics Policy

Cell phones, music players and headphones are not permitted to be used during class hours.

- Please put your cell phone on silent (NOT vibrate).
- No texting is allowed during class.

You will be given one verbal warning if the above is not followed. Should a second warning be necessary, your cell phone, music player and/or headphones will be confiscated and held by the teacher until after class. If a third time occurs, your cell phone, music player and/or headphones will be confiscated and held in the SAEP office and MUST BE PICKED UP BY A PARENT.
After reading through the syllabus, please sign and date and have your student return it to class. The signature constitutes your commitment to the class as we partner to make the next five weeks a life-long educational experience for your student.

**Student/ Parent Agreement:**
Please bring this signed and dated *Adventures in Algebra - Road 1* syllabus agreement to class tomorrow.

If you do not understand any portion of this syllabus, or if you have any questions regarding this class, please do not hesitate to email the teacher.

We have read and understand the contents of this syllabus.

Student name ___________________________________________

Student signature____________________________________________________

Date__________________

Parent/Guardian name _______________________________________________

Parent/Guardian signature_____________________________________________

Date__________________