Algebra I Trimester A

- Using Variables → **2 Questions per concept**
- Exponents & Order of Operation → **2 Questions per concept**
- Exploring Real Numbers → **2 Questions per concept**
- Adding Real Numbers → **2 Questions per concept**
- Subtracting Real Numbers → **2 Questions per concept**
- Multiplying & Dividing Real Numbers → **2 Questions per concept**
- Distributive Property → **2 Questions per concept**
- Properties of Real Numbers → **2 Questions per concept**
- Graphing on the Coordinate Plane
- Solving One-step Equations
- Solving Two-step Equations
- Solving Multi-step Equations
- Equations with Variables on Both Sides
- Equations and Problem Solving
- Formulas
- Measures of Central Tendency
- Inequalities & Their Graphs
- Solving Inequalities Using Addition & Subtraction
- Solving Inequalities Using Multiplication & Division
- Solving Multi-step inequalities
- Compound Inequalities
- Absolute Value Equations & Inequalities
- Ratio & Proportion
- Proportions & Similar Figures
- Proportions & Percent Equations
- Percent of Change
- Applying Ratios to Probability
- Probability of Compound Events
- Relating Graphs to Events
- Relations and Functions
- Function Rules, Tables & Graphs
- Writing a Function Rule
- Direct Variation
- Rate of Change & Slope
- Slope-Intercept Form
- Standard Form
- Point-Slope Form and Writing Linear Equations
- Parallel and Perpendicular Lines
- Graphing Absolute Value Equations

Content Map

Cumulative Testing Design

Test 1

Questions can come from Mi-Climb, Textbooks, Teacher created or Test Generators.

Test 2

Test 3

Test 4

Final Exam

Grading Policy
When students receive a higher grade on the next test it becomes their test grade average. Students are never out of the game to pass the class.

Math Homework Basics

Retention is most critical in the math area. It is very important that teachers not get in the math rut. Homework should be the product of the class work for practice at home. Math teachers don't need to give homework every night. Here are some homework basics:

- Homework is given as an extension of the learning that takes place in the room.
- The amount of homework should be reasonable (a "C" student should not take more than 30 minutes to complete the homework).
- Late work is either not accepted or penalized in grade reduction.
- Guided practice in class should be given to check for
- understanding before students leave the class.
- Teach for retention by having a problem or two from
- previous the day's homework.

Math Homework Strategies

The following 12 strategies should be used randomly and at the teacher's discretion. These strategies break the monotony, hold students more accountable, and should check for understanding.

1. Homework Quiz (similar problems). This is the most frequently used approach. Students are encouraged to ask questions when they go over the homework and write notes on the their homework because it can be used on the quiz. Issue 3 pts. for the quiz and 1 pt. for having the homework completed.

- Teacher corrects only 5 questions and gives a 1 to 5 grade. (Spot Check)
- Students are called on randomly to go to the chalkboard to explain the problem.

1. Students find a partner or are assigned one, and they jointly check each other's work and submit an answer sheet.

5) Do nothing with it on occasion.
6) Students exchange and correct.
7) Student self-corrects and turns it in.
8) Parts are assigned and presented in class by students.

- Students write a paragraph of what the lesson taught them.
- Teacher collects and corrects the entire homework assignment.

1. Use 4-point check system. (4=100% correct, 3=75% correct, 2=50% correct, etc.)

12) Read off answers and have students stand if they agree.

Course Start - Up Exercise

The first assignment at the start of every math term should be a copy of the previous final exam from their last class as a take-home quiz. It should be a low point value so it is not stressful to the students. Students should be encouraged to use their books and notes on it and be given opportunity to do corrections on it. No student should get less than a "B" on it.

This strategy gets a student's math head back in place and gives students a positive attitude about their skills as well as working on long term memory skills.