

8th MCA Prep Course Outline

In MCA prep we will Review all the concepts in our Algebra books and reinforce what the students are learning about in their Algebra books.

Connections to Algebra

Students will learn how to use expressions, equations, and inequalities to model real-life situations and to solve problems.

Properties of Real Numbers

Students will learn how to compute with real numbers.

Solving Linear Equations

Students will learn how to solve linear equations and to use formulas.

Solving Linear Inequalities:

Students will graph inequalities in one variable, solve linear inequalities, and absolute value inequalities.

Graphing Linear Equations and Functions

Students will learn how to graph lines, solve direct variation problems, and evaluate functions.

Writing Linear Equations

Students will learn how to write linear equations and apply them in real-life situations.

Solving Systems of Linear Equations.

Student swill solve linear equations and inequalities by graphing, substitution and elimination.

Exponents and Exponential Functions

Students will learn how to simplify expressions involving exponents and use exponential notation.

First Quarter:

Along with reinforcing the concepts we are talking about in Algebra we will go through prime factorization, greatest common factors, least common multiple, equivalent fractions, mixed numbers, adding and subtracting fractions, multiplying and dividing fractions, comparing fractions, decimals, and percent's, calculating with percent's. Evaluating and approximating square roots, operations with square roots.

Second and Third Quarter:

We will cover every eighth grade concept on Study Island. They include: Rational and Irrational Numbers, Number lines, square roots, rational approximations, exponents, scientific notation, functions, linear vs. non-linear functions, sequences, linear representations, properties of linear graphs, symbolize with linear equations, forms of linear equations, solve linear equations and inequalities, rewrite equations, simplify and evaluate expressions, absolute value, systems of equations, Pythagorean theorem, parallel and perpendicular lines, scatter plots.

Fourth Quarter:

Find what students are still struggling with by doing practice MCA III tests and reinforce those concepts so the students are as prepared as they can be for the MCA III test.

Supplies: Needed everyday, notebook, pencil, pen

Class Participation: Class participation is very important in this class. Most of your grade is on class participation

Homework: There is no homework in this class all work is done in class.

Attendance: Attendance is very important, especially because most of your grade is participation. If a student is gone they can make up the participation points. It may be a worksheet that they need to complete or do 1 hour of study island on their own.

Grading: Grades are determined mostly by participation. In MCA prep students spend at least 1 day in the computer lab going into a program called Study Island. Students are also graded on making progress on this program. Students need to get so many blue ribbons per quarter. This can be on an individual bases as long as the student is showing growth. As teachers we hope that students also show growth on their MAP scores and their MCA test scores.