

## 8<sup>th</sup> Grade Basic Algebra Course Outline

**September:** Chapter A: Connections to Algebra

In this chapter students write and evaluate expressions equations, and inequalities. They learn how to apply the order of operations and to use a problem-solving plan to solve real-world problems.

**October:** Chapter B: Properties of Real Numbers

In this chapter, students will learn about the real number system. They will classify real numbers, perform basic operations, apply properties to evaluate and simplify expressions, and use the Distributive property to write equivalent expressions.

**November:** Chapter 1: Solving Linear Equations

In this chapter, students will learn how to solve linear equations and to rewrite equations and formulas.

**December:** Chapter 2: Solve Linear Inequalities

In this chapter, students will learn how to graph inequalities in one variable, solve linear inequalities, and absolute value inequalities.

**January:** Chapter 3: Graphing Linear Functions

IN this chapter students will learn how to graph lines in standard form, and slope intercept form. Students will also learn about function notation and evaluating functions.

**February:** Chapter 4: Writing Linear Functions

In this chapter students will learn how to write linear equations and functions and apply them in real-life situations. Students will also be talking about scatter plots and analyzing lines of best fit.

**March:** Chapter 5: Solving system of Linear Equations.

In this chapter students will learn how to solve linear equations and inequalities by graphing, substitution and linear combinations. Students will also learn how to graph linear inequalities and system of linear inequalities.

**March/April:** Chapter 6: Exponential Functions and Sequences

In this chapter students will learn about the properties of exponents. Students learn how to simplify expressions involving exponents and use exponential notation. Students also use zero and negative exponents. Students learn how to graph and write rules for exponential functions.

**April:** MCA III Review: Students will practice for the MCA III Test and review any areas of concern.

**May:** Chapter 7: Polynomial Equations and Factoring  
Students will add, subtract, and multiply polynomials. Students will also factor polynomials.

In may we will also be working on projects and our Final test.

Throughout the year we will also take some time to look at the TI-73. The TI-83 will be introduced so students have an idea of how it works for when they get into high school.

**Supplies:** Needed everyday; notebook, pencil, pen  
Other items; graph paper

**Tests, Quizzes:** There will be one or two quizzes per chapter, and a test at the end of the chapter.

**Notes:** Notes will be taken almost every day in class.

**Assignments:** Students will have an assignment almost every night. It is very important to complete the assignments and turn them in on time.

**Class Participation:** Class participation is very important, as students get older. Students will be encouraged to participate in class as much as possible.

**Attendance:** Attendance is very important. If a student needs to be gone for any reason, they need to pick up an absence slip when they return and complete all the work in the time allowed.

**Grading:**

100 – 9 %	A
89 – 8 %	B
79 – 70 %	C
69 – 60 %	D

In 8<sup>th</sup> grade homework is not worth as much as it was in 7<sup>th</sup> grade. Tests and quizzes are worth more than homework is.