

## 7<sup>th</sup> Grade Pre-Algebra Course Outline & Timeline

September: Chapter 1: Integers

In this chapter students will learn what integers are and how to add, subtract multiply and divide integers.

Chapter 2: Rational Numbers

In this chapter, students will learn about rational numbers and how to add, subtract multiply and divide rational numbers.

October: Chapter 3: Expressions & Equations

In this chapter students will learn how to simplify expressions and how to solve one-step and two-step equations using the addition, subtraction, multiplication & division properties of equality.

Chapter 4: Inequalities

In this chapter students will learn how to write and graph inequalities and how to solve one-step and two-step inequalities using the addition, subtraction, multiplication & division properties of inequality.

November: Chapter 5: Ratio & Proportions (Lessons 1-4)

In this chapter students will learn what ratios, rates, and proportions are and how to write and solve proportions.

Chapter 6: Percent

In this chapter students will learn how to compare and order fractions, decimals and percent. They will also learn how to find percent of increase and decrease, discounts and mark-ups, as well as simple interest.

December: Chapter 7: Scale Drawings

In this chapter students will learn use scale and create scale drawings.

Chapter 8: Circles & Area

In this chapter students will learn how to find perimeter, circumference, area of circles, and area of composite figures.

January: Chapter 9: Surface Area & Volume

In this chapter students will learn to use formulas to find surface area and volume of prisms, pyramids, and cylinders.

Chapter 10: Probability & Statistics

In this chapter students will learn about outcomes and events, experimental and theoretical probability, independent and dependent events and comparing populations.

**February:** Chapter 11: Transformations

In this chapter students will learn what congruent and similar figures are and how to translate, reflect, and rotate shapes on a coordinate plane.

Chapter 5.5-6 & 13.1-4:  
Graphing & Writing Linear Equations

In this chapter students will learn that slope is a rate. They will also learn how to graph linear equations using tables and slope-intercept form.

**March:** Chapter 15: Volume & Similar Solids

In this chapter students will learn how to find volume and surface area of cylinders, cones and spheres. They will also learn how to find surface area and volume of similar solids using proportions.

Chapter 16: Exponents & Scientific Notations

In this chapter students will learn how to work with positive and negative exponents, and how to read, write and do operations in scientific notation.

**April:** MCA Review & Practice

Students will practice for the MCA III Test and review any areas of concern.

**May:** Chapter 12: Angles & Triangles

In this chapter students will learn how find measurements of angles in triangle and polygons.

**Supplies:** Notebook, Pencil, Textbook

**Test, Quizzes:** There will be a test after each chapter and may be quizzes throughout the chapter.

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

**Assignments:** Students will have an assignment almost every day. 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.

<b><u>Grading:</u></b>	100 - 90%	A's
	89 - 80%	B's
	79 - 70%	C's
	69 - 60%	D's

In 7<sup>th</sup> grade homework and tests are approximately equal value 50%.

