

Teacher Carla Costa  
 Class Algebra I  
 Grade 8

Month	Content	Skills	Assessment	Essential Questions
September	Chapter 1 - Connections to Algebra	Write and evaluate expressions. Check solutions to equations. Use mental math. Use order of operations. Represent real life situations.	Quizzes and chapter test.	What are some of the basic terms of algebra?
October	Chapter 2 - Properties of real numbers	Operations with real numbers. Use the distributive property. Add and subtract matrices. Find probability of an event.	Quizzes and chapter test.	How are operations with negative numbers performed?
Common Assessment	Number Sense: Students will be presented with a scenario involving numeric reasoning and they will follow a multi-step process to answer the question. The assessment will be evaluated using a rubric focusing not only on the math content, but also on math literacy.			
November	Chapter 3 - Solving linear equations	Solve linear equations in a logical order with all steps shown. Solve multi-stop equations. Use formulas, rates, ratios	Quizzes and chapter test.	How are linear equations solved?

December	Chapter 4 - Graphing linear equations	Graph linear equations. Create scatter plots. Quick graphs with intercepts. Finding the slope of a line. Graphs with slope intercept	Quizzes and chapter test.	What is the connection between an equation and a graph?
January	Chapter 5 - Writing linear equations.	Write linear equations in different forms. Fitting a line to data. Using different forms of a linear equation.	Quizzes and chapter test.	Which form of a linear equation is best to use to solve a certain problem?
Common Assessment	Geometric Reasoning: Students will be presented with a word problem involving geometric reasoning and they will follow a multi-step process to answer the question. The assessment will be evaluated using a rubric focusing not only on the math content, but also on math literacy.			
February	Chapter 6 - Solving and graphing linear inequalities	Solve various kinds of linear inequalities. Use absolute value. Graph linear inequalities. Create stem and leaf and box and whisker plots.	Quizzes and chapter test.	What real life situations are modeled by inequalities?
March	Chapter 7 - Systems of linear equations and inequalities  STATE TESTING	Various ways of solving linear systems and systems of linear inequalities. Graphing solutions.	Quizzes and chapter test.	What real life situations are modeled by systems?

Common Assessment	Fractions/Decimals/Percents: Students will be presented with a scenario involving decimals/fractions/percents and they will follow a multi-step process to answer the question. The assessment will be evaluated using a rubric focusing not only on the math content, but also on math literacy.			
April	Chapter 10 – Polynomials and Factoring  SPRING BREAK	Operations with polynomials. Factoring polynomials.	Quizzes and chapter test.	
May	Pieces of Chapter 8 – Exponents and Exponential Functions and Chapter 9 - Quadratic Equations	Properties of radicals and square roots. Graphing. Using the quadratic formula	Quizzes and chapter test.	What does a U shaped graph mean?
Common Assessment	Algebraic Concepts: Students will be presented with a scenario in which they will have to use algebraic reasoning in order to solve a multi-step problem. The assessment will be evaluated using a rubric focusing not only on the math content, but also on math literacy.			
June	Wrap up loose ends			