

Algebra I Course Description		
First Trimester	Second Trimester	Third Trimester
Text:	Text:	Text:
Algebra I (Larson) Outside Sources: Khan Academy Algebra I : ClassZone	Algebra I (Larson) Outside Sources: Khan Academy Algebra I : ClassZone	Algebra I (Larson) Outside Sources: Khan Academy Algebra I : ClassZone
Objectives:	Objectives:	Objectives:
<ul style="list-style-type: none"> *To be able to represent simple functions as verbal rules, equations, tables, and graphs *To learn the properties of real numbers and of operations, as well as the basics of logical reasoning *To have all the tools necessary to solve equations *To solve equations in one variable using properties of numbers and operations *To graph linear equations and functions *To be able to use slopes and y-intercepts to compare graphs of families of linear functions 	<ul style="list-style-type: none"> *To be able to write linear functions, including those that model real-world data *To be able to write and graph linear inequalities as well as absolute value equations and inequalities *To apply previous knowledge in order to write and solve systems of equations and inequalities 	<ul style="list-style-type: none"> *To be able to study nonlinear relationships *To be able to use properties of exponents, and write rules for and graph exponential functions *To learn to add, subtract, multiply, and factor polynomials *To find roots of polynomial equations and zeros of polynomial functions *To graph, write, and solve quadratic equations *To be able to write quadratic models for data and compare them with linear and exponential models
Topics:	Topics:	Topics:
<ul style="list-style-type: none"> *Writing and evaluating algebraic expressions *Using expressions to write equations and inequalities *Representing functions as verbal rules, equations, tables, and graphs *Performing operations with real numbers *Applying properties of real numbers *Classifying and reasoning with real numbers *Solving equations in one variable *Solving proportion and percent problems *Rewriting equations in two or more variables *Graphing linear equations and functions using a variety of methods *Recognizing how changes in linear equations and functions affect their graphs *Using graphs of linear equations and functions to solve real-world problems 	<ul style="list-style-type: none"> *Writing linear equations in a variety of forms *Using linear models to solve problems *Modeling data with a line of fit *Applying properties of inequality *Using statements with <i>and</i> or <i>or</i> *Graphing inequalities *Solving linear systems by graphing *Solving systems using algebra *Solving systems of linear inequalities 	<ul style="list-style-type: none"> *Applying properties of exponents to simplify expressions *Working with numbers in scientific notation *Writing and graphing exponential functions *Adding, subtracting, and multiplying polynomials *Factoring polynomials *Writing and solving polynomial equations to solve problems *Graphing quadratic functions *Solving quadratic equations *Comparing linear, exponential, and quadratic models