

# Carroll ISD Algebra 3/College Algebra Year-At-A-Glance

	1 <sup>st</sup> Grading Period	2 <sup>nd</sup> Grading Period	3 <sup>rd</sup> Grading Period	4 <sup>th</sup> Grading Period
<b>Mathematical Practices</b>	<ul style="list-style-type: none"> <li>Implementing Mathematical Practices-Determine expressions &amp; values using mathematics procedures and rules</li> <li>Connecting Representations-Translate mathematical information from a single representation or across multiple representations</li> </ul>		<ul style="list-style-type: none"> <li>Justification-Justify reasoning and solutions</li> <li>Communication &amp; Notation-Use correct notation, language, and mathematical conventions to communicate results or solutions</li> </ul>	
<b>Course Content</b>	<b>Unit 1 - Algebra and Geometry Review</b>  <b>Unit 2 - Equations and Inequalities</b>	<b>Unit 3 - Graphs and Functions</b>	<b>Unit 4 - Polynomial and Rational Functions</b>  <b>Unit 5 - Exponential and Logarithmic Functions</b>	<b>Unit 6 - Systems of Equations and Matrices</b>  <b>Unit 7 - Conic Sections</b>
<b>Topic Focus</b>	<b>Unit 1 - Algebra and Geometry Review</b> Real Numbers and Algebraic Expressions Exponents Polynomial Expressions Factoring Polynomials Rational Expressions Perfect Squares and nth Roots Rational Exponents Radical Expressions Geometry  <b>Unit 2 - Equations and Inequalities</b>  Linear Equations and Applications Absolute Value Equations Linear Inequalities and Applications Absolute Value Inequalities	<b>Unit 3 - Graphs and Functions</b>  The Coordinate Plane, Distance, and Midpoint Graphs of Equations Slope and Equations of Lines Linear Applications Circles Functions Graphs of Functions Transformations Combining Functions; Composite Functions; Inverse Functions	<b>Unit 4 - Polynomial and Rational Functions</b>  Quadratic Functions Polynomial Functions Division of Polynomials; Remainder and Factor Theorems Real Zeros of Polynomial Functions Complex Zeros of Polynomials Functions Rational Functions Polynomial and Rational Inequalities  <b>Unit 5 - Exponential and Logarithmic Functions</b>  Graphing Exponential Functions Applications of Exponential Functions Logarithmic Functions Properties of Logarithms Logarithmic and Exponential Equations Applications	<b>Unit 6 - Systems of Equations and Matrices</b>  Systems of Linear Equations in Two Variables Applications of Systems of Linear Equations in Two Variables Systems of Linear Equations in Three Variables Operations with Matrices Using Matrices to Solve Systems of Equations Partial Fraction Decomposition  <b>Unit 7 - Conic Sections</b>  Parabolas Ellipses Hyperbolas

	Rational Equations that Simplify to Linear Complex Numbers Quadratic Equations Rational Equations that Simplify to Quadratic Radical Equations			
<b>Additional Resources</b>  Delta Math				