






# Cornwall-Lebanon School District Curriculum Overview

## College Prep Pre-Calculus- High School

 length of time in weeks	Concepts & Competencies	Common Assessments	Academic Standards
Unit 1 	<p style="text-align: center;"><u>Introduction to Trigonometry</u></p> <p>Students will identify angle measures in both radians and degrees. Students will use the six trigonometric function to solve problems. Students will apply the six trigonometric functions to solve real world applications. Students will determine the exact values of trigonometric functions for special angles.</p>	<ul style="list-style-type: none"> <li>➤ Right Triangle Trig Quiz</li> <li>➤ Applications of Right Triangle Trigonometry Quiz</li> <li>➤ Reference Angles Quiz</li> <li>➤ Introduction to Trigonometry Test</li> </ul>	EU 1.1 EU 1.2
Unit 2 	<p style="text-align: center;"><u>Trigonometry</u></p> <p>Students will graph trigonometric functions. Students will solve trigonometric equations. Students will evaluate trigonometric expressions. Students will prove trigonometric identities. Students will solve problems involving the Law of Sines and Cosines</p>	<ul style="list-style-type: none"> <li>➤ Graphing Trigonometric Functions Quiz</li> <li>➤ Solving Trigonometric Equations Quiz</li> <li>➤ Marking Period 1 Exam</li> <li>➤ Solving Trig Equations Quiz</li> <li>➤ Inverse Trig Functions Quiz</li> <li>➤ Trig Equations and Inverse Trig Functions Test</li> <li>➤ Trig Identities Quiz</li> <li>➤ Law of Sines Quiz</li> <li>➤ Law of Sines and Cosines Test</li> </ul>	EU 2.1 EU 2.2 EU 2.3
Unit 3 	<p style="text-align: center;"><u>Functions and Graphs</u></p> <p>Students will classify a relation as a function. Students will determine the domain and range of a function. Students will apply transformations to the graphs of parent functions. Students will determine the inverse of a function. Students will simplify functions using the algebra of functions. Students will evaluate and graph piecewise defined functions.</p>	<ul style="list-style-type: none"> <li>➤ Algebra 2 Review Quiz</li> <li>➤ Mid Term Exam</li> <li>➤ Translations Quiz</li> <li>➤ Analyzing Functions Quiz</li> <li>➤ Inverse Functions Quiz</li> <li>➤ Algebra of Functions Quiz</li> <li>➤ Piecewise Defined Functions Quiz</li> <li>➤ Functions Test</li> </ul>	EU 2.1 EU 2.3
Unit 4 	<p style="text-align: center;"><u>Polynomial and Rational Functions</u></p> <p>Students will perform synthetic division to find the zeros of a function. Students will graph polynomial functions Students will graph rational functions.</p>	<ul style="list-style-type: none"> <li>➤ Synthetic Division Quiz</li> <li>➤ Zeros of a Polynomial Quiz</li> <li>➤ Marking Period 3 Exam</li> <li>➤ Graphing Polynomials Quiz</li> <li>➤ Graphing Rational Functions Quiz</li> <li>➤ Chapter 4 Test</li> </ul>	EU 1.1 EU 2.2 EU 2.3 EU 2.4

## Unit 5

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### Exponential and Logarithmic Functions

Students will write and graph exponential functions.  
Students will apply exponential functions to real-world applications.  
Students will write and graph logarithmic functions.  
Students will apply logarithmic functions to real-world applications.  
Students will solve exponential and logarithmic equations.

- Exponential Functions Quiz
- Exponential Applications Quiz
- Logarithms Quiz
- Exponents and Logarithms Test
- Solving Exponential and Logarithmic Equations Quiz
- Final Exam

EU 2.3  
EU 3.1  
EU 3.5