





Cornwall-Lebanon School District Curriculum Overview

HS Math Survey CP

 length of time in weeks	Concepts & Competencies	Common Assessments	Academic Standards (PA Core if applicable)
Unit 1  6	<p style="text-align: center;"><u>Factoring Quadratics and Applications</u></p> <p>Students will be able to solve quadratic equations, identify and/or graph the x-intercepts, y-intercept, and vertex of a quadratic function, simplify and/or add, subtract, multiply, and divide rational expressions and solve rational expressions.</p>	<ul style="list-style-type: none"> ➤ Factoring Quiz ➤ Quadratics Test 	CC.2.1.HS.F.2 CC.2.1.HS.F.3 CC.2.1.HS.F.7 CC.2.2.HS.D.2 CC.2.2.HS.D.3 CC.2.2.HS.D.4 CC.2.2.HS.D.5 CC.2.2.HS.D.6 CC.2.2.HS.D.7 CC.2.2.HS.D.8 CC.2.2.HS.D.9
Unit 2  3	<p style="text-align: center;"><u>Exponents and Radicals</u></p> <p>Students will apply and extend the properties of exponents to solve problems with rational exponents. Students will also be able to solve equations involving radical expressions and rational exponents.</p>	<ul style="list-style-type: none"> ➤ Rational Expressions Quiz ➤ Solving Rational Equations ➤ Rational Expressions & Radical Equations Qz 	CC.2.1.HS.F.1 CC.2.1.HS.F.2 CC.2.2.HS.D.2 CC.2.2.HS.D.8 CC.2.2.HS.D.10
Unit 3  3	<p style="text-align: center;"><u>Function</u></p> <p>Students will identify and/or write a function to represent the transformations within a family of functions. They will also be able to identify domain and range of a function, evaluate a composite function and determine the inverse of a function.</p>	<ul style="list-style-type: none"> ➤ Domain & Range Quiz ➤ Functions Exam 	CC.2.1.HS.F.3 CC.2.2.HS.D.3 CC.2.2.HS.D.4 CC.2.2.HS.D.7 CC.2.2.HS.D.10 CC.2.2.HS.C.1 CC.2.2.HS.C.4 CC.2.2.HS.C.6

Unit 4 <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">10</div>	<p style="text-align: center;"><u>Trigonometry</u></p> <p>Students will apply trigonometric ratios to solve problems involving right triangles, apply radian measure of an angle and the unit circle to analyze trig functions, describe the properties of graphs for trig functions.</p>	<ul style="list-style-type: none"> ➤ Solving Right Triangles Quiz ➤ Intro to Trig Quiz ➤ Exact Values of Trig Functions Quiz ➤ Law of Sine Quiz ➤ Law of Cosine Quiz ➤ LOS/LOC Exam 	<p>CC.2.1.HS.F.3 CC.2.1.HS.F.5 CC.2.2.HS.D.7 CC.2.2.HS.D.8 CC.2.2.HS.D.9 CC.2.2.HS.C.7 CC.2.2.HS.C.8 CC.2.3.HS.A.7 CC.2.3.HS.A.14</p>
Unit 5 <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">6</div>	<p style="text-align: center;"><u>Logarithmic and Exponential Functions</u></p> <p>Students will be able to write and/or interpret functions to model exponential growth or decay. They will be able to calculate compound interest, apply the properties of logarithms to simplify logarithmic expressions and solve logarithmic equations.</p>	<ul style="list-style-type: none"> ➤ Factoring Quiz ➤ Intro to Logarithms Quiz ➤ Solving Exponential & Logarithmic Equations Quiz 	<p>CC.2.1.HS.F.3 CC.2.2.HS.D.2 CC.2.2.HS.D.7 CC.2.2.HS.D.9 CC.2.2.HS.D.10 CC.2.2.HS.C.2 CC.2.2.HS.C.3 CC.2.2.HS.C.5 CC.2.2.HS.C.6 CC.2.4.HS.B.2</p>
Unit 6 <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">4</div>	<p style="text-align: center;"><u>Probability</u></p> <p>Students will be able to apply the fundamental counting principle, calculate experimental, theoretical and geometric probability of events, use tree diagrams to find conditional probabilities and create or use probability distributions to calculate expected values.</p>	<ul style="list-style-type: none"> ➤ Probability and Combinatorics Quiz ➤ Probability Test 	<p>CC.2.1.HS.F.3 CC.2.2.HS.D.7 CC.2.4.HS.B.6 CC.2.4.HS.B.7</p>
Unit 7 <div style="border: 1px solid red; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">4</div>	<p style="text-align: center;"><u>Statistics and Data Analysis</u></p> <p>Students will calculate standard deviation and variance for a data set, analyze a data set based on the measures of central tendency, apply the Empirical Rule given a normal distribution and use Z-scores and percentile scores to analyze performance versus a population.</p>	<ul style="list-style-type: none"> ➤ Statistics Quiz 	<p>CC.2.1.HS.F.3 CC.2.2.HS.D.7 CC.2.4.HS.B.1 CC.2.4.HS.B.5</p>