






# Cornwall-Lebanon School District Curriculum Overview

## Algebra 2 College Prep – High School

 length of time in weeks	Concepts & Competencies	Common Assessments	PA Core Standards
Unit 1  3	<u><b>Solving Equations &amp; Inequalities</b></u> Students will solve equations and inequalities including linear, literal, and absolute value. Students will apply these concepts to real world situations.	<ul style="list-style-type: none"> <li>➤ Solving Equations Quiz</li> <li>➤ Solving Inequalities Quiz</li> <li>➤ Absolute Value Equations &amp; Inequalities Quiz</li> <li>➤ Unit 1 Test</li> </ul>	CC.2.1.HS.F.2 CC.2.2.HS.C.3 CC.2.2.HS.C.6 CC.2.2.HS.D.7 CC.2.2.HS.D.8 CC.2.2.HS.D.9 CC.2.2.HS.D.10
Unit 2  7	<u><b>Functions, Equations, &amp; Graphs</b></u> Students will classify relations as function and evaluate functions. Students will state the domain and range of a graph. Students will write linear equations, including parallel and perpendicular lines. Students will graph linear equations, linear inequalities and absolute value functions. Students will apply these concepts to real world situations.	<ul style="list-style-type: none"> <li>➤ Domain &amp; Range Quiz</li> <li>➤ Writing Equations of Lines Quiz</li> <li>➤ Marking Period 1 Exam (cumulative)</li> <li>➤ Graphing Equations and Inequalities Quiz</li> <li>➤ Linear Regression Quiz</li> <li>➤ Graphing Absolute Value Equation &amp; Inequality Quiz</li> </ul>	CC.2.1.HS.F.3 CC.2.2.HS.D.7 CC.2.2.HS.D.9 CC.2.2.HS.D.10 CC.2.2.HS.C.1 CC.2.2.HS.C.2 CC.2.2.HS.C.3 CC.2.2.HS.C.6 CC.2.4.HS.B.2 CC.2.4.HS.B.3
Unit 3  4	<u><b>Systems of Equations &amp; Inequalities</b></u> Students will solve systems of equations graphically and algebraically. Students will solve systems of inequalities and linear programming. Students will apply these concepts to real world situations.	<ul style="list-style-type: none"> <li>➤ Solving Systems of Equations Quiz</li> <li>➤ Applications of Systems of Equations Quiz</li> <li>➤ Systems of Inequalities &amp; Linear Programming Quiz</li> <li>➤ Systems of Equations &amp; Inequalities Test</li> </ul>	CC.2.2.HS.C.3 CC.2.2.HS.C.6 CC.2.2.HS.D.9 CC.2.2.HS.D.10
Unit 4  6	<u><b>Polynomials, Functions, &amp; Operations</b></u> Students will learn and apply properties of exponents. Students will add, subtract, and multiply polynomials. Students will perform function operations and find inverses of functions. Students will factor polynomials, solve by factoring and apply these concepts to real world situations.	<ul style="list-style-type: none"> <li>➤ Properties of Exponents Quiz</li> <li>➤ Polynomials &amp; Function Operations Quiz</li> <li>➤ Factoring Quiz</li> <li>➤ Applications of Quadratics by Factoring Quiz</li> <li>➤ Midterm (cumulative)</li> </ul>	CC.2.1.HS.F.1 CC.2.1.HS.F.7 CC.2.2.HS.C.1 CC.2.2.HS.C.4 CC.2.2.HS.D.3

Unit 5	5	<u><b>Rational Expressions &amp; Equations</b></u> Students will simplify and perform operations with rational expressions. Students will solve rational equations.	<ul style="list-style-type: none"> <li>➤ Multiplying &amp; Dividing Rational Expressions Quiz</li> <li>➤ Adding &amp; Subtracting Rational Expressions Quiz</li> <li>➤ Solve Rational Equations Quiz</li> <li>➤ Rational Expressions &amp; Equations Test</li> </ul>	CC.2.1.HS.F.2 CC.2.2.HS.D.1 CC.2.2.HS.D.6 CC.2.2.HS.D.9
Unit 6	5	<u><b>Radical Expressions &amp; Equations</b></u> Students will simplify and perform operations with radical expressions. Students will solve radical equations. Students will simplify expressions involving complex numbers. Students will apply properties of rational exponents to simplify expressions.	<ul style="list-style-type: none"> <li>➤ Simplifying &amp; Operations with Radicals Quiz</li> <li>➤ Solving Radical Equations Quiz</li> <li>➤ Complex Numbers Quiz</li> <li>➤ Unit Test</li> <li>➤ Marking Period 3 Exam (cumulative)</li> </ul>	CC.2.1.HS.F.1 CC.2.1.HS.F.2 CC.2.1.HS.F.6 CC.2.1.HS.F.7 CC.2.2.HS.C.4 CC.2.2.HS.D.1 CC.2.2.HS.D.6 CC.2.2.HS.D.8 CC.2.2.HS.D.9 CC.2.2.HS.D.10
Unit 7	6	<u><b>Quadratics</b></u> Students will solve quadratic equations by square root property or quadratic formula. Students will graph quadratic equations. Students will apply these concepts to real world situations.	<ul style="list-style-type: none"> <li>➤ Solving Quadratics Quiz</li> <li>➤ Graphing Quadratics Quiz</li> <li>➤ Applications of Quadratics Quiz</li> <li>➤ Quadratics Test</li> </ul>	CC.2.1.HS.F.7 CC.2.2.HS.C.5 CC.2.2.HS.D.4