# Cornwall-Lebanon School District Curriculum Overview
## Algebra 2 – High School

<table>
<thead>
<tr>
<th>Unit</th>
<th>Length of Time in Weeks</th>
<th>Concepts &amp; Competencies</th>
<th>Common Assessments</th>
<th>Academic Standards (PA Core if applicable)</th>
</tr>
</thead>
</table>
| Unit 1 | 3 | **Solving Equations & Inequalities**  
Students will solve equations and inequalities including linear and absolute value. Students will apply these concepts to real world situations. |  
- Solving Equations Quiz  
- Solving Inequalities Quiz  
- Absolute Value Equations & Inequalities Quiz  
- Unit 1 Test |  
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 | **Functions, Equations, & Graphs**  
Students will classify relations as functions 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. |  
- Domain & Range Quiz  
- Writing Equations of Lines Quiz  
- Marking Period 1 Exam (cumulative)  
- Graphing Equations and Inequalities Quiz  
- Linear Regression Quiz  
- Graphing Absolute Value Equation & Inequality Quiz |  
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 | **Systems of Equations & Inequalities**  
Students will solve systems of equations graphically and algebraically. Students will solve systems of inequalities. Students will apply these concepts to real world situations. |  
- Solving Systems of Equations Quiz  
- Applications of Systems of Equations Quiz  
- Systems of Inequalities Quiz  
- Systems of Equations & Inequalities Test |  
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 | **Polynomials, Functions, & Operations**  
Students will learn and apply properties of exponents. Students will add, subtract, and multiply polynomials. Students will perform function operations. Students will factor |  
- Properties of Exponents Quiz  
- Polynomials & Function Operations Quiz  
- Factoring Quiz  
- Midterm (cumulative) |  
CC.2.1.HS.F.1  
CC.2.1.HS.F.7  
CC.2.2.HS.C.1  
CC.2.2.HS.C.4 |
<table>
<thead>
<tr>
<th>Unit</th>
<th>Unit Title</th>
<th>Description</th>
<th>Topics</th>
<th>CC Standards</th>
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<tbody>
<tr>
<td>5</td>
<td>Rational Expressions &amp; Equations</td>
<td>Students will simplify and perform operations with rational expressions.</td>
<td>✓ Multiplying &amp; Dividing Rational Expressions Quiz</td>
<td>CC.2.1.HS.F.2, CC.2.2.HS.D.1, CC.2.2.HS.D.6, CC.2.2.HS.D.9</td>
</tr>
<tr>
<td>6</td>
<td>Radical Expressions &amp; Equations</td>
<td>Students will simplify and perform operations with radical expressions. Students will solve radical equations.</td>
<td>✓ Simplifying &amp; Operations with Radicals Quiz&lt;br&gt;✓ Solving Radical Equations Quiz&lt;br&gt;✓ Marking Period 3 Exam (cumulative)</td>
<td>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</td>
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<tr>
<td>7</td>
<td>Quadratics</td>
<td>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.</td>
<td>✓ Solving Quadratics Quiz&lt;br&gt;✓ Graphing Quadratics Quiz&lt;br&gt;✓ Applications of Quadratics Quiz&lt;br&gt;✓ Quadratics Test&lt;br&gt;✓ Final Exam (cumulative)</td>
<td>CC.2.1.HS.F.7, CC.2.2.HS.C.5, CC.2.2.HS.D.4</td>
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