



# ABSS 8th Grade Advanced Math/Math I Scope and Sequence

| Unit # | Title of Unit                                       | ~ # of Days | Common Core Standards  | Key Concepts  | Pearson CC Math I   | Pearson CC Math II        |
|--------|---|-------------|--|---|---|---------------------------|
| 1      | Reasoning with Equations and Inequalities           | 16          | A.REI.1<br>A.REI.3<br>N.Q.1<br>N.Q.2<br>A.CED.1<br>A.CED.3<br>A.CED.4  | <ul style="list-style-type: none"> <li>Solve linear equations and inequalities</li> <li>Create linear equations and inequalities</li> <li>Use units to solve multi-step problems</li> </ul>   | Chapter Sections:<br>1-2 thru 1-8<br>5-5                        |                           |
| 2      | Linear Relationships (Equations and Inequalities)   | 16          | A.SSE.1<br>A.SSE.1A<br>A.SSE.1B<br>A.CED.1<br>A.CED.2<br>A.CED.3<br>F.IF.4<br>F.IF.5<br>F.IF.6<br>F.IF.7<br>F.IF.7A<br>F.IF.8<br>F.LE.1B<br>F.LE.2<br>F.LE.5<br>A.REI.10<br>A.REI.12<br>G.GPE.5<br>S.ID.7<br>S.ID.6<br>S.ID.6A<br>S.ID.6b<br>S.ID.6c<br>S.ID.8<br>S.ID.9 | <ul style="list-style-type: none"> <li>Interpret Expressions and their parts</li> <li>Interpret Linear Models</li> <li>Create equations in two or more variables</li> <li>Represent and Graph equations and inequalities</li> <li>Interpret functions</li> <li>Analyze functions</li> </ul> | Chapter Sections:<br>1-1<br>2-1 thru 2-5<br>2-7<br>3-1 thru 3-6 |                           |
| 3      | Systems of Linear Equations and Linear Inequalities | 18          | A.CED.3<br>A.REI.5<br>A.REI.6<br>A.REI.11<br>A.REI.12  | <ul style="list-style-type: none"> <li>Represent and Solve Systems of Equations and Inequalities</li> </ul>   | Chapter Sections:<br>4-1 thru 4-6                               |                           |
| 4      | Exponential Relationships                           | 16          | A.SSE.1<br>A.SSE.1b<br>A.SSE.3.c   | <ul style="list-style-type: none"> <li>Use the properties of exponents</li> </ul>   | Chapter Sections:<br>5-1 thru 5-6                               | Chapter Sections:<br>14-1 |

|   |                         |    |  |   |  |                                     |
|---|-------------------------|----|--|---|--|-------------------------------------|
|   |                         |    | <p>A.CED.1<br/> A.CED.2<br/> F.IF.4<br/> F.IF.5<br/> F.IF.6<br/> F.IF.7<br/> F.IF.7e<br/> F.IF.8<br/> F.IF.8b<br/> F.LE.1c<br/> F.LE.2<br/> F.LE.5<br/> A.REI.11<br/> N.RN.1<br/> N.RN.2</p> | <ul style="list-style-type: none"> <li>Exponential Functions</li> <li>Exponential Growth and Decay</li> </ul>                                       |  |                                     |
| 5 | Polynomials & Radicals  | 18 | <p>A.SSE.1<br/> A.SSE.1a<br/> A.SSE.2<br/> A.SSE.3<br/> A.SSE.3a<br/> A.APR.1</p>  | <ul style="list-style-type: none"> <li>Simplifying Radicals</li> </ul>  | Chapter Sections:<br>5-8                 | Chapter Sections:<br>11-1 thru 11-8 |
| 6 | Quadratic Relationships | 20 | <p>A.SSE.1<br/> A.SSE.1a<br/> A.CED.2<br/> F.IF.4<br/> A.SSE.3<br/> A.SSE.3A<br/> F.IF.7<br/> F.IF.7a<br/> F.IF.8<br/> F.IF.8a</p>   |   |  | Chapter Sections:<br>4-1 thru 4-5   |
| 7 | Functions and Models    | 14 | <p>F.IF.1<br/> F.IF.2<br/> F.IF.3<br/> F.IF.4<br/> F.IF.5<br/> F.IF.7<br/> F.IF.9<br/> F.BF.1a<br/> F.BF.1b<br/> F.BF.2<br/> F.BF.3<br/> F.LE.1<br/> F.LE.1a<br/> F.LE.3<br/> S.ID.6a</p>    | <ul style="list-style-type: none"> <li>Relations and Functions</li> <li>Combining Functions</li> <li>Analyzing data</li> <li>Trend Lines</li> </ul> | Chapter Sections:<br>2-6, 5-7 and<br>6-4 | Chapter Sections:<br>12 - 9         |
| 8 | Descriptive Statistics  | 16 | <p>S.ID.1<br/> S.ID.2<br/> S.ID.3<br/> S.ID.5</p>  | <ul style="list-style-type: none"> <li>Frequency and Histograms</li> <li>Measures of Central Tendency</li> <li>Two-Way Frequency Tables</li> </ul>  | Chapter Sections:<br>6-1 thru 6-5        |                                     |

|    |                                 |    |  |   |                                |                                     |
|----|---------------------------------|----|--|---|--------------------------------|-------------------------------------|
| 9  | Connecting Algebra and Geometry | 18 | N.Q.3<br>G.CO.1<br>G.GPE.4<br>G.GPE.6<br>G.GPE.7<br>G.GMD.1<br>G.GMD.3 | <ul style="list-style-type: none"> <li>• Points, Lines and Planes</li> <li>• Measuring Segments, Angles</li> <li>• Angle Pairs</li> <li>• Midpoint and Distance in the Coordinate Plane</li> </ul>  | Chapter Sections: 7-2 thru 7-6 | Chapter Sections: 9-1, 9-3 thru 9-5 |
| 10 | Math 8: Geometry                | 10 | 8.G.1<br>8.G.2<br>8.G.3<br>8.G.4<br>8.G.5<br>8.G.9                     | <ul style="list-style-type: none"> <li>• Similar &amp; Congruent Figures</li> <li>• Translations, Reflections, Rotations</li> <li>• Perimeters &amp; Areas of Similar Figures</li> <li>• Dilations</li> <li>• Volumes of Cylinders</li> <li>• Volumes of Cones</li> <li>• Volumes of Spheres</li> </ul> |                                |                                     |
|    | Math 8: Statistics              | 5  | 8.SP.1<br>8.SP.2<br>8.SP.3<br>8.SP.4                                   | <ul style="list-style-type: none"> <li>• Scatter Plots</li> <li>• Lines of Fit</li> <li>• Two-Way Tables</li> <li>• Choosing a Data Display</li> </ul>  |                                |                                     |

Total Days: 167 (Core) + 7 (Assessments/Review) + 6 (EOC's) = 180

Teachers will have online access to the Pearson Math I & Math II textbooks. Resources from the previous (2012-2014) unit plans are still available on the secondary curriculum website. The scope and sequence should be a beginning point for teachers when building assessments, creating daily lesson plans and meeting with PLC's. Additional resources will be needed to supplement the curriculum in regards to rigor and re-teaching of some standards. The On-Core resource is available at each school and has alignment to the common core math standards. **Prioritized standards are highlighted in yellow.**