



**Course Title:** Algebra IA  
**Content Area:** Mathematics  
**Grade Level:** 9-10

## Scope and Sequence

**Grade Level:** 9-10

**Course Introduction:** Algebra IA is the first of two Algebra 1 courses which are aligned to the Pennsylvania State Keystone Anchors. Topics will build on concepts previously learned in Pre-Algebra.

<b>Units of Study</b>	<b>Standards</b>	<b>Length of Time</b>	<b>Key Content</b>	<b>Assessment Tools</b>	<b>Scaffolding Strategies (Interventions, Special Education)</b>	<b>Resources &amp; Materials</b>
Linear Equations	CC.2.2.HS.D.8 CC.2.2.HS.D.9 CC.2.2.HS.D.5 CC.2.2.HS.D.7 CC.2.2.HS.D.10	7 weeks	- Order of Operations - Simplifying Expressions - Combining Like Terms - Solving Equations	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Graphs and Functions	CC.2.2.HS.C.1 CC.2.2.HS.C.2 CC.2.2.HS.C.3	3 weeks	- Relations and Functions - Domain and Range - Function Rules, Tables, and Graphs - Number Patterns	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software
Coordinate Geometry	CC.2.2.HS.D.7 CC.2.2.HS.D.10	10 weeks	- Rates of Change and Slope - Slope-Intercept Form (Graphing and Writing Equations) - Standard Form (Graphing and Writing Equations) - Use Point-Slope Form to Write Linear Equations - Write Equations Given Various Information - Scatter Plots and Trend Lines	- Teacher created assessments (quizzes/tests) - Blackboard	Students are allowed to retest if needed.	- OneNote - Blackboard - Textbook - Kuta Software

Operations with Real Numbers and Expressions	CC.2.2.8.B.1 CC.2.3.8.A.3	3 weeks	<ul style="list-style-type: none"> <li>- Simplifying Radicals</li> <li>- Applications of Pythagorean Theorem</li> </ul>	<ul style="list-style-type: none"> <li>- Teacher created assessments (quizzes/tests)</li> <li>- Blackboard</li> </ul>	Students are allowed to retest if needed.	<ul style="list-style-type: none"> <li>- OneNote</li> <li>- Blackboard</li> <li>- Textbook</li> <li>- Kuta Software</li> </ul>
Data Analysis and Probability	CC.2.4.HS.B.1	3 weeks	<ul style="list-style-type: none"> <li>- Using Measures of Central Tendency</li> <li>- Probability of Compound Events</li> <li>- Data Plots</li> <li>- Making Predictions</li> </ul>	<ul style="list-style-type: none"> <li>- Teacher created assessments (quizzes/tests)</li> <li>- Blackboard</li> </ul>	Students are allowed to retest if needed.	<ul style="list-style-type: none"> <li>- OneNote</li> <li>- Blackboard</li> <li>- Textbook</li> <li>- Kuta Software</li> </ul>