MATHEMATICS CURRICULUM MAP

8th Grade Algebra 1

(Algebra Pathway)

June 2024

Grade 8 Algebra: Year at a Glance		
Resource: *Big Ideas Math Algebra 1: A Common Core Curriculum* (ISBN: 9781642087178)		
Semester 1	**Standards**	**Big Ideas**
Review		
Equations	A.CED.1, A.CED.4, A.REI.1, A.REI.3	Chapter 1
Inequalities	A.REI.3, A.CED.1	Chapter 2
Functions and Graphing Linear Relationships	F.IF.1, A.CED.2, A.REI.10, F.IF.5, F.IF.7a, F.LE.1b, F.IF.2, F.IF.9, F.IF.4, F.LE.5, F.BF.3, F.IF.7b	Chapter 3
Writing Linear Functions	A.CED.2, F.LE.1b, F.LE.2, F.LE.5, S.ID.6a, S.ID.6b, S.ID.6c., S.ID.7, S.ID.8, S.ID.9, F.IF.3, F.BF.1a, F.BF.2, A.REI.10, F.IF.7b	Chapter 4
Systems of Equations and Inequalities	A.CED.3, A.REI.6, A.REI.5, A.REI.11, A.REI.12	Chapter 5
Midyear Test		
Exponential Functions and Scientific Notation	N.RN.2, N.RN.1, A.CED.2, F.IF.4, F.IF.7e*, F.IF.9, F.BF.1a, F.BF.3, F.LE.1a, F.LE.2, A.SSE.3c, F.IF.8b, F.LE.1c, A.CED.1, A.REI.1, A.REI.11, F.IF.3, F.BF.2, 8.EE.3, 8.EE.4	Chapter 6 of Algebra Book and Ch8 of 8th grade book
Semester 2	**Standards**	**Big Ideas**
Exponential Functions and Scientific Notation (Continued)		
Radicals, Expressions	N.RN.2, N.RN.3, A.CED.1, A.REI.2	Chapter 9 and 10

and Equations		
Polynomials and Factoring	A.APR.1, A.APR.3, A.REI.4b, A.SSE.2, A.SSE.3a, A.SSE.1a	Chapter 7
Graphing and Solving Quadratic Functions	A.CED.2, F.IF.7a, F.IF.9, F.IF.4, A.SSE.3a, F.IF.8a, F.LE.3, F.IF.7a, A.CED.1, A.CED.4, A.REI.4b, A.REI.4a, F.IF.8a	Chapter 8 and 9
Statistics and Probability	S.ID.3, S.ID.1, S.ID.2, S.ID.5	Chapter 11
End of Year Review		

Priority Standards: Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is necessary. These standards are taught in-depth to full mastery.
Supporting vs. Additional: Supporting standards (highlighted in blue) are designed to strengthen the areas of major emphasis. Connections are clear and emphasize coherence between topics. Additional standards (highlighted in yellow) do not connect as tightly as supporting standards.
Light purple signifies that the standard is traditionally taught in Algebra II. These standards will only be taught as extensions for students who are demonstrating readiness. They will not be assessed for mastery.