

Algebra 1-2 Curriculum Map - Phase 1

***The district-adopted high school math curriculum is new for the 2022-23 school year. This map is aligned to the new curriculum and is in Phase 1 of implementation.

Algebra 1-2 is about: (from AZ Standards)

- (1) Deepen and extend understanding of solving equations and systems.
- (2) Compare and contrast the difference in behaviors between linear and non-linear relationships.
- (3) Engage in methods of analyzing, solving and using quadratic functions.
- (4) Apply linear models to data that exhibit a linear trend.

- [Arizona Mathematics Standards Algebra 1-2](#)
- The standard number is designed for recording purposes and does not imply instructional sequence or importance.
- Our Governing Board adopted curriculum resources for Algebra 1-2 are ALEKS and McGraw Hill.

Unit #	Unit Name	Key Content	AZ Standards
	Initial Knowledge Check	Students will complete the Initial Knowledge Check on the ALEKS platform during the first week of school.	
1	Introduction to Algebra	<ul style="list-style-type: none"> • Write and evaluate numerical and algebraic expressions • Simplify expressions using the Distributive Property • Evaluate absolute value expressions 	A-SSE.A1a A-SSE.A1b N-RN.B3
2	Equations & Inequalities	<ul style="list-style-type: none"> • Solve linear equations in one variable • Solve proportions • Use formulas to solve real-world problems • Write and solve linear inequalities • Graph linear inequalities in two variables • Apply linear inequalities in problem-solving situations 	A-CED.A1 A-CED.A2 A-CED.A4 A-REI.A1 A-REI.B3
3	Introduction to Functions	<ul style="list-style-type: none"> • Represent relations and determine whether a relation is a function • Use function notation and find function values • Graph linear and nonlinear functions and identify their attributes 	N-Q.A1 N-Q.A2 A-SSE.A1 a&b F-IF.A1 F-IF.A2 F-IF.B4 F-IF.B5 F-BF.A1 F-IF.A3 N-Q.A2 N-Q.A3 A1.F-IF.B4 A1.F-IF.C9 A-REI.D10
4	Linear Functions	<ul style="list-style-type: none"> • Graph linear, piecework-defined, step, and absolute value functions • Find and interpret the rate of change and slope of lines • Identify the effects of transformations on the graphs of linear and absolute value functions • Create linear equations in slope-intercept, point-slope, and standard forms • Use scatter plots to make and evaluate predictions, and use best-fit lines and correlation coefficients to determine how well linear functions fit sets of data • Determine whether a situation illustrates correlation or causation 	A-CED.A2 A-CED.A4 F-IF.A1 F-IF.C7 F-IF.C9 F-IF.B4 F-IF.B5 F-IF.B6 F-LE.A1b F-LE.A2 S-ID.C7 S-ID.C8 F-LE.B.5 F-IF.C.7 F-BF.A.1 F.LE.A2 A-REI.D10 A-REI.D11 S-ID.B6a S-ID.B6b

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		<ul style="list-style-type: none"> Find inverses of functions Write and Solve exponential functions Graph and transform exponential functions Understand geometric sequences 	F-BF.B3
5	Systems of Linear Inequalities	<ul style="list-style-type: none"> Write and solve linear inequalities Graph linear inequalities in two variables Apply linear inequalities in problem-solving situations Solve systems of equations using a variety of methods Solve systems of equations using graphing technology Graph the solution sets of systems of linear inequalities Solve systems of equations using a variety of methods Solve systems of equations using graphing technology Graph the solution sets of systems of linear inequalities 	A.CED.A3 N-Q.A3 F-LE.B.5 A-REI.C5 A-REI.C6 A-REI.D11 A-REI.D12
6	Exponential Functions	<ul style="list-style-type: none"> Apply the properties of exponents to simplify expressions Simplify radical expressions Solve exponential equations Write and Solve exponential functions Graph and transform exponential functions Understand geometric sequences 	A-SSE.B3 A-CED.A.1 A-CED.A.2 F-LE.A.1a F-LE.A.1b F-LE.A.1c F-LE.A.2 F-LE.A.3 F-LE.B.5 F-IF.B4 F-IF.B5 F-IF.C7 F-IF.C.8 F-IF.C.9 F-BF.A1 F-IF.A3 F.LE.A2 A- REI.D.11 F-BF.B3
7	Polynomials	<ul style="list-style-type: none"> Add, subtract, and multiply polynomials Factor polynomials, including in the case of special products Understand how polynomials are related to special products 	A-SSE.A1a A-SSE.A1b A- SSE.A2 A-SSE.B3a & b A-APR.A1
8	Quadratic Functions & Equations	<ul style="list-style-type: none"> Graph quadratic functions and their transformations Solve quadratic equations using a variety of methods Solve systems of linear and quadratic equations 	A-APR.B3 A-CED.A1 A-CED.A4 A-SSE.A2 A-SSE.B3a A- SSE.B3b A-REI.A.1 F-IF.A1 F-IF.B4 F-IF.B5 F-IF.C7 F-IF.C8a F-IF.C9 F-LE.A2 A-REI.B4a A-REI.B4b A-REI.D10 A-REI.D11 F-BF.B3
9	Data Analysis & Probability	<ul style="list-style-type: none"> Represent data using numerical statistics and graphical methods Analyze the shapes of distributions Summarize and interpret categorical data using frequency tables 	N-Q.A1 N-Q.A2 N-Q.A3 S-ID.C8 S-ID.C9 F-IF.B4 A-CED.A2 S-ID.A1 S-ID.A2 S-ID.A3 S-ID.B5 S-ID.B6a S-ID.B6b S-CP.A.1 S-CP. A.2

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10	Jumpstart Geometry (Optional)	<ul style="list-style-type: none">• Supplemental - Sine, Cosine, Tangent• Supplemental - Distance Formula• Supplemental - Pythagorean Theorem• Supplemental - Simplifying Radicals	
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