

**Algebra 1 Suggested Timeline
Shared Units Project
2018-2019**

Unit 1 Quantities, Expressions, and Equations (22 days)	Task 1: <i>Speed, Distance, Time</i> N.Q.1, N.Q.2	1 day
	Task 2: <i>Felicia's Drive</i> N.Q.1, N.Q.1a, N.Q.1c, N.Q.2, N.Q.3	1 day
	Task 3: <i>Leaky Faucet</i> N.Q.1, N.Q.1a, N.Q.1b, N.Q.1c, N.Q.2, N.Q.3	3 days
	Task 4: <i>Dairy Barn</i> N.Q.1, N.Q.3, A.CED.2	3 days
	Common Formative Assessment (Tasks 1-4)	1 day
	Task 5: <i>Interpreting Algebraic Expressions</i> A.SSE.1, A.SSE.1a, A.SSE.1b	3 days
	Task 6: <i>Building and Solving Equations 2</i> A.REI.1, A.REI.3	3 days
	Task 7: <i>Yo-Yo Problem</i> A.CED.1, A.REI.3	1 days
	Task 8: <i>Jamal and Aunt Eunice</i> A.CED.1, A.REI.35	1 day
	Common Formative Assessment (Tasks 5-8)	1day
	Task 9: <i>Solving Linear Equations and Inequalities</i> A.CED.1, A.REI.3	2 days
	Review & End-of-Unit Assessment	2 days
Notes: <i>Dairy Barn:</i> If time is an issue the teacher may want to eliminate Problem 6.		
Unit 2 Reasoning with Equations and Inequalities in Two Variables (24 days)	Task 1: <i>Soup and Beans</i> A.CED.2	1 day
	Task 2: <i>Jaden's Phone Plan</i> A.CED.1, A.CED. 2, A.REI.3	1 days
	Task 3: <i>Paper Cups</i> A.CED.1, A.CED. 2, A.REI.3	3 days
	Task 4: <i>Ivy Smith Grows Up</i> A.CED.1, A.CED.2, A.CED.3, A.REI.3	2 days
	Task 5: <i>Rearranging Literal Equations</i>	2 days

	A.CED.4, A.REI.1	
	Common Formative Assessment (Tasks 1-5)	1 day
	Task 6: Solving Systems of Linear Equations by Graphing A.REI.6	2 days
	Task 7: Solving Systems of Linear Equations Algebraically A.REI.5, A.REI.6	3 days
	Task 8: Solving Problems Using Systems of Equations A.CED.3, A.REI.6	2 days
	Task 9: The Cash Box A.CED.3, A.REI.6	0 days
	Common Formative Assessment (Tasks 6-9)	1 day
	Task 10: Summer Job A.REI.12	2 days
	Task 11: Family Outing A.CED.1, A.CED.2, A.CED.3, A.CED. 4, A.REI.1, A.REI.3, A.REI.5, A.REI.6, A.REI.12	2 days
	Review & End-of-Unit Assessment	2 days

Notes:

Task 9: *Cash Box* –may be used as extra practice, homework, formative assessment, etc. Do not skip it.

Task 11: *Family Outing* - may be used as unit review.

Unit 3 Linear Functions (17 days)	Task 1: Exploring Functions with Fiona F.IF.1, F.IF.2 F.IF.4, F.IF.5, F.IF.6	3 day
	Task 2: Linear Functions A.REI.10, F.IF.1, F.IF.2, F.IF.4, F.BF.1, F.BF.1a, F.LE.1b, F.LE.2, F.LE.5, A.CED.1, A.CED.2	2 days
	Task 3: Talk Is Cheap A.REI.10, F.IF.1, F.IF.2, F.IF.4, F.IF.5, F.IF.7, F.IF.2, F.BF.1, F.BF.1a, F.LE.1b, F.LE.2, A.CED.2	2 days
	Common Formative Assessment (Tasks 1-3)	1 day
	Task 4: You're Toast Dude A.REI.10, F.IF.1, F.IF.2, F.IF.4, F.IF.5, F.IF.6, F.IF.7, F.BF.1, F.BF.1a, F.LE.1b, F.LE.2, A.CED.1, A.CED.2, A.REI.3	2 days
	Task 5: Draining Pools A.REI.10, F.IF.1, F.IF.2, F.IF.4, F.BF.1, F.BF.1a, F.LE.1b, F.LE.2,	1 day

	F.LE.5, A.CED.1, A.REI.3	
	Task 6: Sequences as Functions A.REI.10, F.IF.1, F.IF.2, F.IF.3, F.IF.4, F.IF.5, F.IF.7, F.BF.1, F.BF.1a, F.BF.2, F.LE.1b, F.LE.2, F.LE.5, A.CED.1, A.REI.3	3 days
	Common Formative Assessment (Tasks 4-6)	1 day
	Review & End-of-Unit Assessment	2 days

Notes:

Task 4: *You're Toast Dude* – If time is an issue, Problems 7 and 8 may be omitted.

Task 5: Draining Pools may be used as formative assessment. Do not skip.

Unit 4 Exploring Quadratic Functions (32 days)	Task 1: Marshmallow Catapult SID 6, SID 6a	1 day
	Task 2: Marshmallow Catapult: Finding a Function SID 6, SID 6a, FIF 4, FIF 5	2 days
	Task 3 Standard Form of a Quadratic Function FIF 4, FIF 5, FIF 7, FIF 7a, BF1	2 days
	Task 4: Party Like a Rock Star FIF 6	2 days
	Task 5: Fireworks Celebration FIF 4, FIF 5, FIF 7, FIF 7a	1 day
	Common Formative Assessment (Tasks 1-5)	1 day
	Task 6: Investigating Translations FIF 7, FIF 7a, FBF 3	2 days
	Task 7: Reflections, Stretches, and Shrinks FIF 7, FIF 7a, FBF 3	2 days
	Task 8: Combining Transformations FIF 7, FIF 7a, FBF 3	2 days
	Mid-Unit Assessment	1 day
	Task 9: The Factored Form of a Quadratic Function ASSE 2, ASSE 3, ASSE 3a, FIF 7, FIF 7a, FIF 8, FIF 8a	2 days
	Task 10: Factored to Standard Form: Multiplying Binomials APR 1, ASSE 2, ASSE 3, ASSE 3a, FIF 8, FIF 8a	1 day
Task 11: Special Products APR 1, FIF 8, FIF 8a	1 day	

	Task 12: Converting from Standard to Factored Form ASSE 2, ASSE 3, ASSE 3a, FIF 7, FIF 7a, FIF 8, FIF 8a	2 days
	Task 13: Solving Quadratic Equations by Factoring ASSE 2, ASSE 3, ASSE 3a, ACED 1, ACED 2, AREI 4, AREI 4b	2 days
	Task 14: Converting from Standard to Vertex Form Using the Axis of Symmetry ASSE 3, ASSE 3b, FIF 7, FIF 7a, FIF 8, FIF 8a	2 days
	Common Formative Assessment (Tasks 9-14)	1 day
	Task 15: Converting from Standard to Vertex Form by Completing the Square ASSE 3b, FIF 8, FIF 8a	2 days
	Task 16: Forming Quadratics FIF 7, FIF 7a, FIF 8, FIF 8a	1 day
	Review & End-of-Unit Assessment	2 days

Notes

Task 5: *Fireworks Celebration* – may be used as practice, homework or performance task in preparation for the CFA

Task 7: *Reflections, Stretches, and Shifts* – may want to complete Sets A and B in class and Set C for homework

Task 8: *Combining Transformations* – may be used as a performance task or check for understanding in preparation for the CFA

	Task 1: Projectile Motion FIF 4, FIF 5, FIF 7, FIF 7a, ACED 1	1 day
	Task 2: Factoring Quadratic Trinomials APR 1, ASSE 2, ASSE 3, ASSE 3a	2 days
	Task 3 Factoring Algebraic Expressions APR 1, ASSE 2, ASSE 3, ASSE 3a	2 days
	Task 4: Solving Quadratic Equations by Factoring APR1, ASSE 2, AREI 4, AREI 4b	1 day
	Task 5: Examining Quadratic Relationships APR 1, ASSE 1, ASSE 1a, ASSE 1b, ASSE 2, ACED 1, AREI 4, AREI 4b	2 days
	Common Formative Assessment (Tasks 1 - 5)	1 day
	Task 6: Rational and Irrational Numbers 1 N.RN.2, N.RN.3	2 days

<p>Unit 5</p> <p>Solving Quadratic Equations</p> <p>(22 days)</p>		
	Task 7: <i>Why Your Calculator Does What It Does</i> N.RN.2, N.RN.3	1 day
	Task 8: <i>Rational and Irrational Numbers 2</i> N.RN.2, N.RN.3	2 days
	Common Formative Assessment (Tasks 6 - 8)	1 day
	Task 9: <i>Solving Equations by Extractions of Roots</i> AREI 4, AREI 4b, FIF 7, FIF 7a	1 day
	Task 10: <i>Solving Quadratic Equations by Completing the Square</i> ASSE 2, ASSE 3b, AREI 4, AREI 4a, AREI 4b, FIF 7, FIF 7a	1 day
	Task 11: <i>Solving Quadratic Equations Using the Quadratic Formula</i> AREI 4, AREI 4a, AREI 4b	2 days
	Task 12: <i>The Nature of Solutions</i> AREI 4, AREI 4a, AREI 4b	1 day
	Review & End-of-Unit Assessment	2 days
<p>Unit 6</p> <p>Exponential Functions</p> <p>(19 days)</p>	Task 1: <i>Properties of Exponents Revisited</i> Review of prerequisite content	1 day
	Task 2: <i>Who Wants to Be a Millionaire?</i> CED 1, CED 2, REI 10, IF 1, IF 2, IF 4, IF 5, IF 6, IF 7, IF 7e, FBF 1, FLE 2	2 days
	Task 3: <i>Graphing Exponential Functions</i> REI 10, FIF 7, FIF 7e	1 day
	Task 4: <i>College Tuition</i> CED 1, CED 2, FIF 1, FIF 2, FBF 1, FLE 1c, FLE 5	1 day
	Task 5: <i>Comparing Investments</i> FIF 4, FIF 7, FIF 7a, FIF 7e, FIF 9, FBF 1, FLE 1, FLE 1a, FLE 1b, FLE 1c, FLE 2, FLE 3, FLE 5	3 days
	Common Formative Assessment (Tasks 1 - 5)	1 day
	Task 6: <i>Geometric Sequences</i> FIF 3, FIF 5, FBF 1, FBF 1a, FBF 2	2 days
	Task 7: <i>One Function to Another</i> FBF 3	2 days
	Task 8: <i>Intersection = Solutions</i> REI 10, REI 11	1 day
	Common Formative Assessment (Tasks 6 - 8)	1 day

	Task 9: Modeling with Linear and Exponential Functions FIF 4, FIF 5, BF 1, FLE 1, FLE 1a, FLE 1b, FLE 1c, FLE 2, FLE 3, CED 1, CED 2	2 days
	Review & End-of-Unit Assessment	2 days
Unit 7 Describing Data (23 days)	Task 1: Sad to Mad SID 1, SID 2	2 day
	Task 2: Sampling Rectangles SID 1, SID 2, SID 3	3 days
	Task 3: BMI Calculations SID 1, SID 2, SID 3	2 days
	Task 4: Reviewing Histograms SID 1, SID 2, SID 3	2 days
	Task 5: Representing Data 1: Using Frequency Graphs SID 1, SID 2, SID 3	2 days
	Task 6: Representing Data 2: Using Box Plots SID 1, SID 2, SID 3	2 days
	Common Formative Assessment (Tasks 1-6)	1 day
	Task 7: A Transportation Referendum SID 5	2 days
	Task 8: Cyber Bullying SID 5	1 days
	Task 9: Birds' Eggs SID 6, SID 6a, SID 6c, SID 7	2 days
	Task 10: Linear Regression SID 6, SID 6a, SID 6c, SID 7, SID 8, SID 9	3 days
	Common Formative Assessment (Tasks 7-10)	1 day
	Task 11: Equal Salaries for Equal Work SID 6, SID 6a, SID 6c, SID 7, SID 8, SID 9	2 days
Review & End-of-Unit Assessment	2 days	

Notes:

If time is an issue, the teacher may want to eliminate Tasks 3 and 11 (shaded in yellow).