

Instructional Guide
Algebra Year 1 of 2 – Mathematics
January 2023 through June 2023

Algebra Year 1 of 2 Overview

Module	Standards
M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs	N-Q.1, N-Q.2, N-Q.3, A-SSE.1a, A-SSE.1b, A.SSE.2, A-APR.1, 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.10, A-REI.12
M2: Descriptive Statistics	S-ID.1, S-ID.2, S-ID.3, S-ID.5, S-ID.6, S-ID.6a, S-ID.6b, S-ID.6c, S-ID.7, S-ID.8, S-ID.9
M3: Linear and Exponential Functions	A-REI.11, A.SSE.3c, A.CED.1, F-BF.1a, F-IF.1, F-IF.2, F-IF.3, F-IF.4, F-IF.5, F-IF.6, F-IF.7a, F-IF.9, F-BF.3, F-LE.1, F-LE.1a, F-LE.1b, F-LE.1c, F-LE.2, F-LE.3, F-LE.5
Exam Review	Regents Exam June 2023

See PAGE 4 for your January to June PACING

9-12 MATHEMATICS - DIGITAL RESOURCES

	Moby Max	IXL
Purpose	Moby Max is designed to find and fix learning gaps using the power of personalized learning.	IXL is a targeted learning tool used to provide personalized action plans and links related to the academic progress and areas of need for each student.
District Expectations	<p>Every student will take the Moby Max</p> <p>Moby Max will be used to provide intervention in the areas where individual students are struggling.</p> <p>Moby Max may also be used to support grade level instruction.</p> <p>Moby Max covers content only through grade 8</p>	<p>IXL will be used as a district benchmark for all high school math courses <u>and</u> grade 8 Algebra during three identified testing windows: BOY (diagnostic), MOY (snapshot) and EOY (snapshot).</p> <p>Students must also work in IXL diagnostic arena for 10 minutes <u>each week</u> in order to keep their levels and recommendations up to date.</p>
Available supports/webinars	https://vimeo.com/mobymax	https://www.ixl.com/userguides

Instructional Guide
Algebra Year 1 of 2 – Mathematics
January 2023 through June 2023

IMPORTANT Module 2 Notes:

Based on the **Next Generation Math Standards (to be implemented SY23-24)**, please keep the following upcoming changes in mind, as you teach this Module:

- Operations with Radicals were added
- Solving Linear/Quadratic Systems was added
- Factoring quadratics has been limited to trinomials with a leading coefficient of 1 after a GCF has been factored
- Complete the square has been limited to a leading coefficient of 1 and an even “b” term
- Residuals have been moved to a Plus Standard
- Sequences will be limited to explicit forms only and will be written in subscript notation

Module 2 Vocabulary

Module 2 Vocabulary			
Association	Conditional Relative Frequency	Correlation Coefficient	Interquartile Range
Outlier	Residual	Residual Plot	Sample Standard Deviation
Skewed Data Distribution			
Familiar Terms			
Box plot	Data Distribution	Dot plot	Histogram
Median	Mean	Mean Absolute Deviation	Quartile
Residual plot	Variability		

Instructional Guide
Algebra Year 1 of 2 – Mathematics
January 2023 through June 2023

IMPORTANT Module 3 Notes:

Based on the *Next Generation Math Standards (to be implemented SY23-24)*, please keep the following upcoming changes in mind, as you teach this Module:

- Operations with Radicals were added
- Solving Linear/Quadratic Systems was added
- Factoring quadratics has been limited to trinomials with a leading coefficient of 1 after a GCF has been factored
- Complete the square has been limited to a leading coefficient of 1 and an even “b” term
- Residuals have been moved to a Plus Standard
- Sequences will be limited to explicit forms only and will be written in subscript notation

Module 3 Vocabulary

Average Rate of Change	Arithmetic Sequence	Common Difference	Common Ratio	Continuous/Discrete Data Set & Graphs
Domain & Range	Explicit Formula	Exponential Decay	Exponential Function	Exponential Growth
Function Notation	Geometric Sequence	Parent Function	Piecewise Function	Recursive Formula
Transformation of Functions	Vertical & Horizontal Shift	Vertical & Horizontal Stretch	Vertical Line test	

Instructional Guide
Algebra Year 1 of 2 – Mathematics
January 2023 through June 2023

PACING Plan for January 2023 – June 2023

Please note that there will be times throughout the YEAR when you will either be embedding lessons from the previous grade level, omitting lessons at this grade level, and/or combining lessons at this grade level. This is all to ensure that our students have the foundational and grade level conceptual understanding to progress masterfully as the standards outline.

Algebra Year 1 of 2			
Quarter 3 - weeks	Quarter 3 - dates	January – June PACING	Instructional Notes
Week 21	1/30 – 2/3	M2 Lesson 1 M2 Lesson 2	Finish Line Module 2 Lesson 1 pp 100-107
Week 22	2/6 – 2/10	M2 Lesson 3 M2 Lesson 4	Finish Line Module 2 Lesson 2 pp 108-117
Week 23	2/13 – 2/17	M2 Lesson 5 M2 Lesson 6	*Mid-Winter Recess next week
Week 24	2/27 – 3/3	M2 Lesson 7 M2 Lesson 8	
Week 25	3/6 – 3/10	Review and Mid Module	
Week 26	3/13 – 3/17	M2 Lesson 9 M2 Lesson 10	Finish Line Module 2 Lesson 3 pgs. 118-125

Instructional Guide
Algebra Year 1 of 2 – Mathematics
January 2023 through June 2023

Week 27	3/20 – 3/24	M2 Lesson 11 M2 Lesson 12	Finish Line Module 2 Lesson 4 pgs. 126-138 *use to prep for Lesson 12
Week 28	3/27 – 3/31	M2 Lesson 13 M2 Lesson 14	Finish Line Module 2 Lesson 5 pgs. 139-148 *Spring Recess next week
Week 29	4/10 – 4/14	M2 Lesson 15 M2 Lesson 16	
Week 30	4/17 – 4/21	M2 Lesson 17 M2 Lesson 18	
Quarter 4 - weeks	Quarter 4 - dates	January - June PACING	Instructional Notes
Week 31	4/24 – 4/28	M2 Lesson 19 M2 Lesson 20	3.5 Instructional Days (ERD & SCD)
<i>IXL EOY Screener (5/1 – 5/17)</i>			
Week 32	5/1 – 5/5	Review and End of Module Assessment	
Week 33	5/8 – 5/12	M3 Lesson 1 M3 Lesson 2	3.5 Instructional Days (ERD & SCD)
Week 34	5/15 – 5/19	M3 Lesson 3 M3 Lesson 4	Finish Line Module 3 Lesson 1: Sequences PP156-161 and 274-280
Week 35	5/22 – 5/26	M3 Lesson 5 M3 Lesson 6	
Week 36	5/30 – 6/2	M3 Lesson 7 M3 Lesson 8	4 Days (Off Mon. 5/29)

Instructional Guide
Algebra Year 1 of 2 – Mathematics
January 2023 through June 2023

Week 37	6/5 – 6/9 and 6/12 - 6/14	M3 Lesson 9 M3 Lesson 10	M3 Lessons 9-12: Finish Line p 160- 184
Week 38	6/15 – 6/16	Regents Week	
Week 39	6/20 – 6/23	Regents Week	