· Advanced Algebra Quarter 1 Breakdown · North Community High School · 2026-2027 ·

Teacher: Mrs. Freedland **– Email:** emily.freedland@mpls.k12.mn.us **– Google Voice:** 612-460-1481

Timeline	Standards Taught/Learned	Assessments/Mastery
Week One* **(Sept 8 - Sept 11)**	Introductions, Course Expectations, and Math Puzzles	
Week Two **(Sept 14 - Sept 18)**	Unit 1 - Functions and their Inverses (1.1-1.3) ● Model linear, quadratic, and exponential relationships using a table, graph, or explicit equation. ● Describe the domain and range of a function. ● Use function notation to solve for inputs and outputs.	Quiz 1.1-1.3 (Friday, September 18th)
Week Three* **(Sept 22 - Sept 25)**	Unit 1 - Functions and their Inverses (1.4-1.6) ● Model a relationship between two quantities by using either quantity as the input variable. ● Understand the inverse of a quadratic function. ● Determine the relationship between the domain and range of a function and its inverse. ● Understand when the inverse of a function is also a function.	
Week Four **(Sept 28 - Oct 2)**	Unit 1 - Functions and their Inverses (1.7-1.9) ● Represent the inverse of an exponential function. ● Compare the inverse relationship for an exponential function with the inverses of linear and quadratic functions. ● Determine if a function is invertible. ● Understand the input-output relationship between a function and its inverse. ● Find the inverse of a function.	Quiz 1.4-1.6 (Monday, September 28th) Trashketball (Friday, October 2nd)
Week Five **(Oct 5 - Oct 9)**	Unit 2 - Logarithmic Functions (2.1-2.3) ● Expand and condense exponential expressions. ● Simplify exponential expressions using the product rule, quotient rule, zero exponent rule, and negative exponent rule.	Quiz 2.1-2.3 (Friday, October 9th)
MidQuarter		
Week Six* ** **(Oct 12 - Oct 13)**	Unit 2 - Logarithmic Functions (Log Graphs Card Sort) ● Identify common features of the graphs of logarithmic functions. ● Transform the graph of a logarithmic function.	
Week Seven **(Oct 19 - Oct 23)**	Unit 2 - Logarithmic Functions (2.4-2.6) ● Understand how logarithmic functions are related to exponential functions. ● Find exact and estimated values of logarithms.	Quiz 2.4-2.6 (Friday, October 23rd)
Week Eight **(Oct 26 - Oct 30)**	Unit 2 - Logarithmic Functions (2.7-2.9) ● Make conjectures about logarithm properties. ● Use logarithm properties to find equivalent algebraic expressions.	Quiz 2.7-2.9 (Friday, October 24th)

	● Use logarithm properties to find values for logarithmic expressions using other known values.	
Week Nine* **(Nov 2 - Nov 6)**	Unit 2 - Logarithmic Functions (2.10-2.12) ● Identifying an exponential or logarithmic problem in context. ● Use logarithms to solve exponential equations. Quarter 1 Review (1 Day)	
Week Ten* **(Nov 9 - Nov 12)**	Quarter 1 Review (1 Day) Quarter 1 Test (2 Days) Extra Credit Opportunities	Quarter 1 Test (Tuesday, November 10th & Wednesday, November 11th)
Final		

Credit for this course is earned through mastery of the above standards and mastery of the standards is shown through the above assessment options. Showing mastery through assessments of standards earns you credit for the course.

Resources for the above standards can be found on our Google Classroom page as the quarter progresses. Please let me know if you would like to meet before or after school for additional support.