Middle School Algebra I Syllabus

Course Description

Algebra I introduces students to foundational algebraic concepts that are critical for higher-level mathematics. The course emphasizes reasoning with expressions and equations, linear and quadratic functions, polynomials, inequalities, and exponential relationships. Students will apply problem-solving strategies to real-world scenarios and prepare for success on STAAR and future advanced math courses.

Curriculum Overview

Unit	Unit Name	Readiness TEKS	Supporting TEKS
Unit 1	Solving Linear Equations	A.5A	A.5B, A.12C, A.12D, A.12E
Unit 2	Domain & Range (Linear Functions)	A.2A	A.12A, A.12B
Unit 3	Linear Functions	A.3B, A.3C	A.3A, A.3E
Unit 4	Graphs of Linear Functions	A.2C	A.2B, A.2D–A.2G, A.4A–A.4C
Unit 5	Systems of Equations	A.2I, A.5C	A.3F, A.3G
Unit 6	Inequalities	A.3D	A.2H, A.3H
Unit 7	Simplifying Polynomials	A.11B	A.11A
Unit 8	Quadratic Functions	A.6A, A.7A, A.7C	A.6B, A.6C, A.8B
Unit 9	Solving Quadratic Functions	A.8A, A.10E	A.7B, A.10A–A.10D, A.10F
Unit 10	Exponential Functions	A.9C, A.9D	A.9A, A.9B, A.9E, A.12C, A.12D

Skills & Standards

- Solve and apply linear equations and inequalities

- Understand and analyze functions, domain, and range

- Model and graph linear relationships

- Solve systems of equations algebraically and graphically

- Simplify and operate with polynomials

- Interpret and model quadratic and exponential functions

- Use multiple methods to solve quadratic equations

- Apply knowledge of functions to real-world contexts

- Analyze data for SAT readiness and probability concepts

- Build mathematical reasoning and communication skills

Grading

Please refer to the Forney ISD Grading Guidelines for policies on grading, late work, reassessment opportunities, and academic expectations