

8<sup>th</sup> Grade Mathematics Syllabus  
Trenton Rosenwald Middle School  
John Glenn-Hoekstra, instructor  
i-Ready Curriculum Associates  
2025-2026

CASE Test 1 – September 22-26, 2025

Unit 1 – Geometric Figures: Rigid Transformations and Congruence

Lesson 1 – Understanding Rigid Transformations and their Properties

Lesson 2 – Work with Single Rigid Transformations in the Coordinate Plane

Lesson 3 – Work with Sequences of Transformations and Congruence

Unit 2 – Geometric Figures: Transformations, Similarity, and Angle Relationships

Lesson 4 – Understanding Dilations and Similarity

Lesson 5 – Perform and Describe Transformations Involving Dilations

Lesson 6 – Describe Angle Relationships

Lesson 7 – Describe Angle Relationships in Triangles

Unit 3 – Linear Relationships: Slope, Linear Equations, and Systems

Lesson 8 – Graph Proportional Relationships and Define Slope

Lesson 9 – Derive and Graph Linear Equations of the Form ‘ $y = mx + b$ ’

CASE Test 2 – January 13-23, 2026

Lesson 10 – Solve Linear Equations in One Variable

Lesson 10a - Write and Solve Linear Inequalities

Lesson 11 – Determine the Number of Solutions to One-Variable Equations

Lesson 12 – Understand Systems of Linear Equations in Two Variables

Unit 4 – Functions: Linear and Non-Linear Relationships

Lesson 15 – Understand Functions

Lesson 16 – Use Functions to Model Linear Relationships

Lesson 17 – Compare Different Representations of Functions

Lesson 18 – Analyze Graphs of Functional Relationships Qualitatively

Unit 5 – Integer Exponents: Properties and Scientific Notation

Lesson 19 – Apply Exponent Properties for Positive Integer Exponents

Lesson 20 – Apply Exponent Properties for All Integer Exponents

CASE Test 3 – March 16-27, 2026

Lesson 21 – Express Numbers Using Integer Powers of 10

Lesson 22 – Work with Scientific Notation

Unit 6 – Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem

Lesson 23 – Find Square Roots and Cube Roots to Solve Problems

Lesson 24 – Express Rational Numbers as Fractions and Decimals

Lesson 25 – Find Rational Approximations of Irrational Numbers

Lesson 26 – Understand the Pythagorean Theorem and Its Converse

Lesson 27 – Apply the Pythagorean Theorem

Lesson 28 – Solve Problems with Volumes of Cylinders, Cones, and Spheres

Unit 7 – Statistics: Two-Variable Data and Fitting a Linear Model

Lesson 29 – Analyze Scatter Plots and Fit a Linear Model to Data

Lesson 30 – Write and Analyze an Equation for Fitting a Linear Model to Data