

8th Grade Mathematics Syllabus
Trenton Rosenwald Middle School
Jennifer Walls, instructor
i-Ready Curriculum Associates
2026-2027

CASE Test 1 – September 29--October 7 2026

- 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 ' $y = mx + b$ '
 - 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

CASE Test 2 – January 12-22, 2027

- 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
 - Lesson 21 – Express Numbers Using Integer Powers of 10
 - Lesson 22 – Work with Scientific Notation

CASE Test 3 – March 9-25, 2027

- 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