

Bayley Miller 2025-2026  
7<sup>th</sup> Grade Mathematics Syllabus  
Trenton Rosenwald Middle School

**\*\*\*\*CASE Test 1 – September 22-26, 2025\*\*\*\***

**Unit 1 – Proportional Relationships: Ratios, Rates, and Circles**

- Lesson 1 – Solve Problems Involving Scale
- Lesson 2 – Find Unit Rates Involving Ratios of Fractions
- Lesson 3 – Understand Proportional Relationships
- Lesson 4 – Represent Proportional Relationships
- Lesson 5 – Solve Proportional Relationships Problems
- Lesson 6 – Solve Area and Circumference Problems Involving Circles

**Unit 2 – Numbers and Operations: Add and Subtract Rational Numbers**

- Lesson 7 – Understand Addition with Negative Integers
- Lesson 8 – Add with Negative Numbers
- Lesson 9 – Understand Subtraction with Negative Integers
- Lesson 10 – Add and Subtract Positive and Negative Numbers

**\*\*\*\*CASE Test 2 – January 13-23, 2026\*\*\*\***

**Unit 3 – Numbers and Operations: Multiply and Divide Rational Numbers**

- Lesson 11 – Understand Multiplication with Negative Integers
- Lesson 12 – Multiply and Divide with Negative Numbers
- Lesson 13 - Express Rational Numbers as Terminating or Repeating Decimals
- Lesson 14 – Use the Four Operations with Negative Numbers

**Unit 4 – Algebraic Thinking: Expressions, Equations, and Inequalities**

- Lesson 15 – Write Equivalent Expressions Involving Rational Numbers
- Lesson 16 – Understand Reasons for Rewriting Expressions
- Lesson 17 – Understand Multi-Step Equations
- Lesson 18 – Write and Solve Multi-Step Equations
- Lesson 19 – Write and Solve Inequalities

**Unit 5 – Proportional Reasoning: Percents and Statistical Samples**

- Lesson 20 – Solve Problems Involving Percents
- Lesson 21 – Solve Problems Involving Percent Changes and Percent Error
- Lesson 22 – Understand Random Sampling
- Lesson 23 – Reason About Sample Data
- Lesson 24 – Compare Populations

**\*\*\*\*CASE Test 3 – March 16-27, 2026\*\*\*\***

**Unit 6 – Geometry: Solids, Triangles, and Angles**

- Lesson 25 – Solve Problems Involving Area and Surface Area
- Lesson 26 – Solve Problems Involving Volume
- Lesson 27 – Describe Plane Sections of Three-Dimensional Figures
- Lesson 28 – Find Unknown Angle Measures
- Lesson 29 – Draw Plane Figures with Given Conditions

**Unit 7 – Probability: Theoretical Probability, Experimental Probability, and Compound Event**

- Lesson 30 – Understand Probability
- Lesson 31- Solve Problems Involving Experimental Probability
- Lesson 32- Solve Problems Involving Probability Models
- Lesson 33- Solve Problems Involving Compound Events