



MATHEMATICS CURRICULUM MAP

7th Grade Mathematics

(Pre-Algebra Pathway)

June 2025

Deerfield Public Schools District 109
517 Deerfield Road | Deerfield, Illinois 60015
(847) 945-1844
www.dps109.org

Grade 7 Mathematics: Year at a Glance

Resource: Big Ideas Math: Grade 7 Modeling Real Life Common Core

Semester 1	Standards	Big Ideas
Adding and Subtracting Rational Numbers	7.NS.1 (a, b, c, d) (Add and subtract rational numbers) 7.NS.3 (Solve real-world problems with rational numbers)	Chapter 1
Multiplying and Dividing Rational Numbers	7.NS.2 (a, b, c, d) (Multiply and divide rational numbers) 7.NS.3 (Solve real-world problems with rational numbers)	Chapter 2
Expressions	7.EE.1 (Add, subtract, factor, expand linear expressions) 7.EE.2 (Understand rewriting expressions as strategy for solving in context)	Chapter 3
Equations and Inequalities	7.EE.4 (Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities) 7.EE.4a (Solve real-world and multi-step equations involving rational numbers) 7.EE.4b (solve, graph, interpret, and word problems with inequalities)	Chapter 4
Semester 2	Standards	Big Ideas
Ratios and Proportions	7.RP.1 (Complex unit rate) 7.RP.2 (a, b, c, d) (Proportional relationships in tables, graphs, equations, descriptions) 7.RP.3 (Solve multi-step ratio and percent problems) 7.G.1 (Scale Drawings)	Chapter 5
Percents	7.RP.3 (Solve multi-step ratio and percent problems) 7.EE.3 (Solve multi-step real-world problems and convert between forms in context)	Chapter 6

Geometric Shapes & Surface Area and Volume	7.G.4 (Area and Circumference of a circle) 7.G.6 (Solve real-world problems involving area, volume and surface area) 7.G.3 (Describe 2-D figures resulting from slicing 3-D figures)	Chapter 9 + Chapter 10
Unknown Angle Measures	7.G.5 (Solve equations for unknown angles) 7.G.2 (Draw geometric shapes with given conditions)	Chapter 9
Probability	7.SP.5 (Probability of chance event) 7.SP.6 (Collect data on chance process) 7.SP.7 (a, b) (Develop probability model) 7.SP.8 (a, b, c) (Find probabilities of compound events)	Chapter 7
Statistics	7.SP.1 (Sample populations) 7.SP.2 (Interpret random sample data) 7.SP.3 (Visual overlap of data distributions) 7.SP.4 (Measures of center and variability with 2 populations)	Chapter 8
Priority Standards: Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is necessary. These standards are taught in-depth to full mastery. Supporting vs. Additional: Supporting standards (highlighted in blue) are designed to strengthen the areas of major emphasis. Connections are clear and emphasize coherence between topics. Additional standards (highlighted in yellow) do not connect as tightly as supporting standards.		