

Principles of Middle School Math 2

Scope & Sequence

★ Unit 1 | Adding and Subtracting Rational Numbers

Topic 1: Rational Numbers and Their Opposites (7.NOS.A.1.a)

Topic 2: Understanding Rational Numbers (7.NOS.A.2.d)

Topic 3: Adding Integers (7.NOS.A.1.b)

Topic 4: Subtracting Integers (7.NOS.A.1.c)

Topic 5: Adding & Subtracting Signed Decimals - Multi-Step contextual problems (7.NSO.A.1.b, 7.NSO.A.1.d)

Topic 6: Adding & Subtracting Signed Fractions - Multi-Step contextual problems (7.NSO.A.1.b, 7.NSO.A.1.d)

★ Unit 2 | Multiplying & Dividing Rational Numbers

Topic 1: Multiplying Integers (7.NOS.A.2.a, 7.NOS.A.2.c)

Topic 2: Multiplying Signed Decimals (7.NOS.2.c)

Topic 3: Multiplying Signed Fractions (7.NOS.2.c)

Topic 4: Dividing Integers (7.NOS.A.2.b, 7.NOS.A.2.c)

Topic 5: Dividing Signed Decimals (7.NOS.2.c)

Topic 6: Dividing Signed Fractions (7.NOS.2.c)

Topic 7: Multi-Step Contextual Problems (7.NOS.2.e)

★ 📄 Rational Number Performance Task

Topic: Multi-Step Problems with *All Four* Operations (7.NOS.A.3)

★ Unit 3 | Ratios & Proportional Relationships

Topic 1: Connect Ratios, Rates, and Unit Rates (supports 7.AT.A.1)

Topic 2: Determine Unit Rates (7.AT.A.1)

Topic 3: Understand Proportional Relationships: Equivalent Ratios (7.AT.A.2.a)

Topic 4: Describe Proportional Relationships: Constant of Proportionality (7.AT.A.2.b, (7.AT.A.3.a)

Topic 5: Graph Proportional Relationships (7.AT.A.3.b)

Topic 6: Apply Proportional Reasoning to Solve Problems (7.AT.A.4)

Topic 7: Apply Proportional Reasoning: Similarity & Scale Drawings (7.GR.A.1)

Topic 8: Apply Proportional Reasoning: Percent of Change (7.GR.A.1)

Topic 9: Apply Proportional Reasoning: Percent Applications (7.AT.A.4)

★ Unit 4 | Algebraic Expressions

Topic 1: Write & Evaluate Algebraic Expressions (supports 7.AT.C.7)

Topic 2: Simple Interest (supports 7.AT.C.7, 7.AT.A.4)

Topic 3: Generate Equivalent Expressions (7.AT.B.5)

Topic 4: Simplify Expressions: Combining Like Terms (7.AT.B.5)

Topic 5: Expand Expressions: Distributive Property (7.AT.B.5)

Topic 6: Factor Expressions (7.AT.B.5)

Topic 7: Analyze Equivalent Expressions (7.AT.B.6)

★ Unit 5 | Algebraic Equations & Inequalities

Topic 1: Analyzing Contextual Situations: Equation or Inequality? (7.AT.C.7)

Topic 2: Write Two-Step Equations (7.AT.C.8.a)

Topic 3: Solve Two-Step Equations (7.AT.C.8.b, 7.AT.C.8.c)

Topic 4: Solve Equations Using the Distributive Property (7.AT.C.8.b, 7.AT.C.8.c)

Topic 5: Write Two-Step Inequalities (7.AT.C.9.a)

Topic 6: Solve & Graph the Solution Set to Two-Step Inequalities (7.AT.C.9.b, 7.AT.C.9.c)

★ Unit 6 | Geometric Reasoning & Measurement

Topic 1: Introduction to Circles (supports 7.GR.B.3, 7.GR.B.4.b)

Topic 2: Circumference of Circles (7.GR.B.3)

Topic 3: Area of Circles (7.GR.B.3)

Topic 4: Solving Problems Involving Area (7.GR.B.4.a, 7.GR.B.4.c)

Topic 5: Describe Cross Sections (7.GR.A.2)

Topic 6: Solving Problems Involving Surface Area: Polyhedrons (7.GR.B.4.a, 7.GR.B.4.c)

Topic 7: Solving Problems Involving Volume: Polyhedrons (7.GR.B.4.a, 7.GR.B.4.c)

Topic 8: Solving Problems Involving Volume: Cylinders, Cones, & Spheres (7.GR.B.4.b, 7.GR.B.4.c)

★ Unit 7 | Data & Statistics

Topic 1: Populations & Samples (7.DS.A.1.a, 7.DS.A.1.b)

Topic 2: Drawing Inferences from Random Samples (7.DS.A.2.a, 7.DS.A.2.b)

Topic 3: Measures of Center (7.DS.B.3.b)

Topic 4: Measures of Variability (7.DS.B.3.b)

Topic 5: Making Comparative Inferences About Two Populations (7.DS.B.3.a, 7.DS.B.3.b)

Topic 6: Using Statistical Measures to Compare Populations (7.DS.B.3.b, 7.DS.B.3.c)

★ Unit 8 | Probability

Topic 1: Likelihood & Probability (7.DS.C.4)

Topic 2: Theoretical Probability (supports 7.DS.C.5.b)

Topic 3: Experimental Probability (7.DS.C.5.a, 7.DS.C.5.b)

Topic 4: Compare & Interpret Probabilities (7.DS.C.5.b, 7.DS.C.5.c)

Topic 5: Create & Use Uniform Probability Models (7.DS.C.6.a)

Topic 6: Create & Use Probability Models from Relative Frequencies (7.DS.C.6.b, 7.DS.C.6.c)