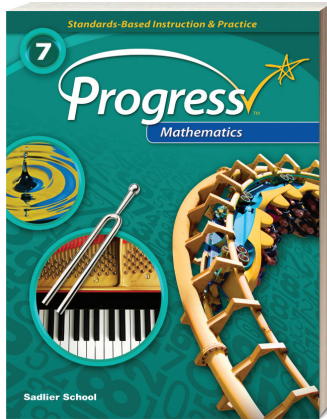


SADLIER

Progress Mathematics

Standards-Based Instruction & Practice



Aligned to the

Pennsylvania Core Standards for Mathematics

Grade 7

Contents

2.1	Number and Operations	2
2.2	Algebraic Concepts	3
2.3	Geometry	3
2.4	Measurement, Data, and Probability	4

2.1 Numbers and Operations

MATHEMATICS STANDARDS

(D) Ratios and Proportional Relationships

- CC.2.1.7.D.1 Analyze proportional relationships and use them to model and solve real-world and mathematical problems.

SADLIER PROGRESS MATHEMATICS, GRADE 7

Lesson 1
Compute Unit Rates—pp. 10–14

Lesson 2
Identify Proportional Relationships—pp. 18–25

Lesson 3
Identify the Constant of Proportionality—pp. 26–33

Lesson 4
Represent Proportional Relationships with Equations—pp. 34–41

Lesson 5
Interpret Graphs of Proportional Relationships—pp. 42–49

Lesson 6
Problem Solving: Multi-step Ratio Problems—pp. 50–57

Lesson 7
Problem Solving: Multi-step Percent Problems—pp. 58–65

2.1 Numbers and Operations

MATHEMATICS STANDARDS

(E) The Number System

- CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.

SADLIER PROGRESS MATHEMATICS, GRADE 7

Lesson 8
Understand Addition of Integers—pp. 72–79

Lesson 11
Understand Multiplication of Integers—pp. 96–103

Lesson 12
Understand Division of Integers—pp. 104–111

Lesson 13
Multiply and Divide Rational Numbers—pp. 112–119

Lesson 14
Convert Rational Numbers to Decimal Form—pp. 120–127

Lesson 15
Apply Rational-Number Operations—pp. 128–135

2.2 Algebraic Concepts

MATHEMATICS STANDARDS

(B) Expressions & Equations

- CC.2.2.7.B.1 Apply properties of operations to generate equivalent expressions.
- CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.

SADLIER PROGRESS MATHEMATICS, GRADE 7

Lesson 16
Combine Like Terms to Simplify Linear Expressions—pp. 142–149

Lesson 17
Expand and Factor Linear Expressions—pp. 150–157

Lesson 18
Problem Solving: Multi-step Problems with Rational Numbers—pp. 158–165

Lesson 19
Solve Linear Equations—pp. 166–173

Lesson 20
Problem Solving: Linear Equations—pp. 174–181

Lesson 21
Solve Linear Inequalities—pp. 182–189

Lesson 22
Problem Solving: Linear Inequalities—pp. 190–197

2.3 Geometry

MATHEMATICS STANDARDS

(A) Geometry

- CC.2.3.7.A.1 Visualize and represent geometric figures and describe the relationships between them.
- CC.2.3.7.A.3 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.

SADLIER PROGRESS MATHEMATICS, GRADE 7

Lesson 23
Use Scale Drawings to Solve Problems—pp. 204–211

Lesson 26
Slice Three-Dimensional Figures—pp. 228–235

Lesson 27
Use Formulas for Area and Circumference of Circles—pp. 236–243

Lesson 28
Use Equations to Find Unknown Angle Measures—pp. 244–251

Lesson 29
Problem Solving: Area, Volume, and Surface Area—pp. 252–259

2.4 Measurement, Data, and Probability

MATHEMATICS STANDARDS

(B) Statistics and Probability

- CC.2.4.7.B.1 Draw inferences about populations based on random sampling concepts.
- CC.2.4.7.B.2 Draw informal comparative inferences about two populations.
- CC.2.4.7.B.3 Investigate chance processes and develop, use, and evaluate probability models.

SADLIER PROGRESS MATHEMATICS, GRADE 7

Lesson 30
Understand Sampling—pp. 266–273

Lesson 31
Use Sampling to Draw Inferences—pp. 274–281

Lesson 32
Use Visual Overlap to Compare Distributions—pp. 282–289

Lesson 33
Use Sample Statistics to Compare Populations—pp. 290–297

Lesson 34
Understand Probability of a Chance Event—pp. 298–305

Lesson 35
Relate Relative Frequency and Probability—pp. 306–313

Lesson 38
Find Probabilities of Compound Events—pp. 330–337

Lesson 39
Represent Sample Spaces for Compound Events—pp. 338–345

Lesson 40
Simulate Compound Events—pp. 346–353