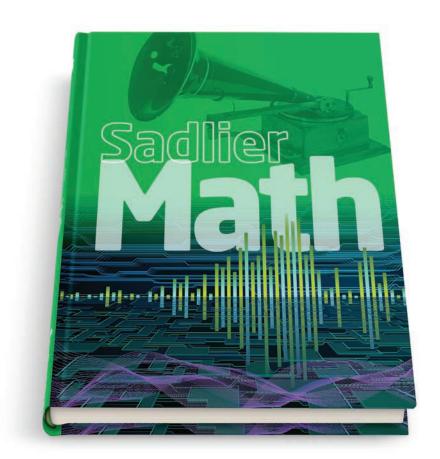
# Sadlier School

# Sadlier Math™

Correlation to the Diocese of Grand Rapids
Office of Catholic Schools Curriculum for Mathematics

Grade 3



Learn more at www.SadlierSchool.com/SadlierMath

NUMBER	
Third Grade Mathematics Standards	Sadlier Math, Grade 3
<b>3.Math.N.1</b> Use a number line to locate and compare (less than, greater than, equal to) whole numbers and commonly used fractions.	Chapter 9: 9-3 & 9-5  • 9-3 Find Unit Fractions on a Number Line—pp. 192–193  • 9-5 Find Fractions on a Number Line—pp. 198–199  Chapter 10: 10-3 through 10-6  • 10-3 Find Equivalent Fractions on a Number Line—pp. 214–215  • 10-4 Compare Fractions with the Same Denominator—pp. 218–219  • 10-5 Compare Fractions with the Same Numerator—pp. 220–221  • 10-6 Order Fractions—pp. 222–223
<b>3.Math.N.2</b> Develop and use strategies to estimate computations involving fractions relevant to students' experience.	See Grade 4  Chapter 11: 11-2 through 11-5, 11-7 & 11-8  • 11-2 Add Fractions: Like Denominators—pp. 226-227  • 11-3 Decompose Fractions as Sums of Unit Fractions—pp. 228-229  • 11-4 Use Models to Subtract Fractions—pp. 230-231  • 11-5 Subtract Fractions: Like Denominators—pp. 232-233  • 11-7 Add Mixed Numbers: Like Denominators—pp. 238-239  • 11-8 Subtract Mixed Numbers: Like Denominators—pp. 240-241
<b>3.Math.N.3</b> Use whole numbers rounded to the nearest 10 or 100 to determine the reasonableness of a whole number computation.	Chapter 1: 1-4 through 1-6  1-4 Round Numbers to the Nearest Ten—pp. 10-11 1-5 Round Numbers to the Nearest Hundred—pp. 12-13 1-6 Problem Solving: Use a Four-Step Process (reasonable sum)—pp. 14-15  Chapter 2: 2-5 through 2-7 2-5 Use Place Value to Add: Regroup Once (answer is reasonable)—pp. 32-33 2-6 Use Place Value to Add: Regroup Twice (reasonable estimates)—pp. 34-35 2-7 Add with Three or More Addends (answer is reasonable)—pp. 36-37  Chapter 3: 3-4 through 3-5 3-4 Subtract Three-Digit Numbers (reasonable estimates)—pp. 54-55 3-5 Subtract Across Zeros (reasonable estimates)—pp. 56-57
<b>3.Math.N.4</b> Use inverse operations to solve problems.	Chapter 3: 3-1, 3-2 & 3-6  • 3-1 Estimate Differences—pp. 46-47  • 3-2 Relate Addition and Subtraction—pp. 48-49  • 3-6 Problem Solving: Read and Understand—pp. 58-59  Chapter 7: 7-1  • 7-1 Relate Multiplication and Division—pp. 142-143
<b>3.Math.N.5</b> Develop fluency of multiplication and division of whole numbers within 100.	Chapter 5: 5-1 through 5-6  5-1 Multiply by 2—pp. 88-89  5-2 Multiply by 5—pp. 90-91  5-3 Multiply by 9—pp. 92-93  5-4 Multiply by 1 and 0—pp. 96-97  5-5 Multiply by 10—pp. 98-99  5-6 Find Patterns in the Multiplication Table—pp. 100-101  continued



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Third Grade Mathematics Standards	Sadlier Math, Grade 3
	Chapter 6: 6-1 through 6-6  • 6-1 Break Apart to Multiply—pp. 112-113  • 6-2 Multiply by 3—pp. 114-115  • 6-3 Multiply by 4—pp. 116-117  • 6-4 Multiply by 6—pp. 118-119  • 6-5 Multiply by 7—pp. 120-121  • 6-6 Multiply by 8—pp. 122-123  Chapter 7: 7-2 through 7-5  • 7-2 Divide by 2—pp. 144-145  • 7-3 Divide by 3—pp. 146-147  • 7-4 Divide by 4—pp. 150-151  • 7-5 Divide by 5—pp. 152-153
	Chapter 8: 8-1 through 8-5  8-1 Divide by 6—pp. 162–163  8-2 Divide by 7—pp. 164–165  8-3 Divide by 8—pp. 166–167  8-4 Divide by 9—pp. 168–169  8-5 One and Zero in Division—pp. 172–173
3.Math.N.6 Use basic number combinations for multiplication and division to mentally compute related problems.	Chapter 5: 5-1 through 5-6  5-1 Multiply by 2—pp. 88-89 5-2 Multiply by 5—pp. 90-91 5-3 Multiply by 9—pp. 92-93 5-4 Multiply by 1 and 0—pp. 96-97 5-5 Multiply by 10—pp. 98-99 5-6 Find Patterns in the Multiplication Table—pp. 100-101  Chapter 6: 6-1 through 6-7, 6-9 through 6-11 6-1 Break Apart to Multiply—pp. 112-113 6-2 Multiply by 3—pp. 114-115 6-3 Multiply by 4—pp. 116-117 6-4 Multiply by 6—pp. 118-119 6-5 Multiply by 7—pp. 120-121 6-6 Multiply by 8—pp. 122-123 6-7 Use a Bar Model to Multiply—pp. 126-127 6-9 Use the Associative Property to Multiply—pp. 130-131 6-10 Find More Multiplication Patterns—pp. 132-133 6-11 Multiply by Multiples of 10—pp. 134-135  Chapter 7: 7-1 through 7-5 7-1 Relate Multiplication and Division—pp. 142-143 7-2 Divide by 2—pp. 144-145 7-3 Divide by 3—pp. 150-151 7-5 Divide by 5—pp. 152-153  Chapter 8: 8-1 through 8-5, 8-7 & 8-8 8-1 Divide by 7—pp. 164-165 8-3 Divide by 9—pp. 166-167 8-4 Divide by 9—pp. 166-167 8-4 Divide by 9—pp. 168-169 8-5 One and Zero in Division—pp. 172-173 8-7 Fact Families—pp. 176-177 8-8-8 Use Facts to Solve Problems—pp. 178-179

## Third Grade Mathematics Standards

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### Sadlier Math, Grade 3

# **3.Math.N.7** Select and apply the best method to solve word problems.

#### **Problem Solving Math Practices**

- A Four-Step Process—p. xxi
- Make sense of problems/Use reasoning-p. xxii
- Explain your reasoning/Model with mathematics-p. xxiii
- Use the right tools/Be precise—p. xxiv
- Look for a pattern-p. xxv

#### **Problem Solving Strategies**

- Make and Use a Plan-p. xxvi
- Work Backward—p. xxvii
- Use Logical Reasoning-p. xxviii
- Read and Understand—p. xxix
- Write and Solve an Equation—p. xxx

#### **Chapter 1: 1-6**

• 1-6 Problem Solving: Use a Four-Step Process—pp. 14-15

#### **Chapter 2: 2-8**

• 2-8 Problem Solving: Use a Model-pp. 38-39

#### **Chapter 3: 3-6**

• 3-6 Problem Solving: Read and Understand—pp. 58-59

#### **Chapter 4: 4-7**

• 4-7 Problem Solving: Write an Equation—pp. 80-81

### **Chapter 5: 5-8**

• 5-8 Problem Solving: Compare Models—pp. 104-105

### Chapter 6: 6-8

• 6-8 Problem Solving: Make a Table—pp. 128-129

#### **Chapter 7: 7-6**

• 7-6 Problem Solving: Use Drawings to Solve Problems—pp. 154-155

#### **Chapter 8: 8-6**

• 8-6 Problem Solving: Work Backward—pp. 174-175

## Chapter 9: 9-7

• 9-7 Problem Solving: Use a Model—pp. 202-203

## Chapter 10: 10-7

• 10-7 Problem Solving: Act It Out-pp. 224-225

## Chapter 11: 11-6

• 11-6 Problem Solving: Write an Equation—pp. 244-245

### Chapter 12: 12-6

• 12-6 Problem Solving: Compare Models—pp. 264-265

# Chapter 13: 13-513-5 Problem Solving: Use Logical Reasoning—pp. 286-287

Chapter 14: 14-5

# • 14-5 Problem Solving: Choose a Strategy—pp. 304-305 **Chapter 15: 15-6**

• 15-6 Problem Solving: Guess and Test—pp. 324-325

#### Chapter 16: 16-4

• 16-4 Problem Solving: Compare Strategies—pp. 340-341

to describe multiplication and division of whole

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numbers up to 100.

#### **Third Grade Mathematics Standards** Sadlier Math, Grade 3 **3.Math.N.8** Solve problems with multiple steps Chapter 3: 3-6 • 3-6 Problem Solving: Read and Understand (two-step problems) involving any combination of addition, pp. 58-59 subtraction, multiplication, and division, including **Chapter 6: 6-8** those with solutions that are not whole numbers. • 6-8 Problem Solving: Make a Table (two-step problems)—pp. 128-129 **Chapter 8: 8-6** • 8-6 Problem Solving: Work Backward (solve multistep problems) pp. 174-175 Chapter 12: 12-5 • 12-5 Data and Two-Step Problems-pp. 260-261 3.Math.N.9 Create and use models and drawings Chapter 4: 4-1 through 4-6 • 4-1 Represent Multiplication as Repeated Addition-pp. 66-67

• 4-2 Represent Multiplication on a Number Line-pp. 68-69

• 4-6 Represent Division by Repeated Subtraction—pp. 78-79

 4-3 Represent Multiplication as Arrays—pp. 70-71 • 4-4 Multiply with the Commutative Property—pp. 74-75

• 4-5 Represent Division by Sharing-pp. 76-77

### **ALGEBRA** Third Grade Mathematics Standards Sadlier Math, Grade 3 **3.Math.A.1** Apply the commutative, associative, **Chapter 2: 2-1** 2-1 Use Addition Properties—pp. 22-23 and distributive properties of operations to **Chapter 4: 4-4** compute with whole numbers. • 4-4 Multiply with the Commutative Property—pp. 74-75 Chapter 6: 6-1, 6-3 through 6-5, 6-9 through 6-11 • 6-1 Break Apart to Multiply (distributive property)-pp. 112-113 • 6-3 Multiply by 4-pp. 116-117 • 6-4 Multiply by 6 (commutative property)—pp. 118-119 • 6-5 Multiply by 7 (commutative property)—pp. 120-121 • 6-9 Use the Associative Property to Multiply-pp. 130-131 • 6-10 Find More Multiplication Patterns—pp. 132-133 6-11 Multiply by Multiples of 10 (associative/distributive properties) pp. 134-135 Chapter 15: 15-4 • 15-4 Find Area Using the Distributive Property—pp. 320-321 Chapter 16: 16-1 • 16-1 Understand Perimeter (associative property)—pp. 332-333

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ALGEBRA	
Third Grade Mathematics Standards	Sadlier Math, Grade 3
3.Math.A.2 Describe and extend geometric and numeric patterns.	Problem Solving Math Practices  Look for a pattern—p. xxv  Chapter 2: 2-2  2-2 Explore Addition Patterns—pp. 24-25  Chapter 5: 5-6  5-6 Find Patterns in the Multiplication Table—pp. 100-101  Chapter 6: 6-10  6-10 Find More Multiplication Patterns—pp. 132-133  Chapter 10: 10-1  10-1 Whole Numbers and Fractions (describe patterns)—pp. 210-211  Chapter 14: 14-5  14-5 Problem Solving: Choose a Strategy (describe pattern)—pp. 304-305

GEOMETRY	
Third Grade Mathematics Standards	Sadlier Math, Grade 3
<b>3.Math.G.1</b> Identify, compare, and analyze properties of 2D and 3D shapes to classify them.	Chapter 14: 14-1 through 14-3  • 14-1 Classify Polygons—pp. 294-295  • 14-2 Classify Quadrilaterals—pp. 296-297  • 14-3 Draw Quadrilaterals—pp. 298-299
	See also Grade 2  Chapter 13: 13-3 & 13-4  • 13-3 Identify Three-Dimensional Shapes—pp. 565-568  • 13-4 Faces, Edges, Vertices—pp. 569-572
<b>3.Math.G.2</b> Identify and describe line and rotational symmetry in 2D and 3D shapes and designs.	See Grade 4  Chapter 17: 17-4  • 17-4 Symmetry—pp. 376-377  See also Grade 6  Chapter 9: 9-8  • 9-8 Reflections of Points (Develop Concepts: Symmetry)—pp. 212-213
<b>3.Math.G.3</b> Describe the results of subdividing, combining, and transforming shapes.	Chapter 14: 14-4  • 14-4 Compose and Decompose Shapes—pp. 302-303

MEASUREMENT	
Third Grade Mathematics Standards	Sadlier Math, Grade 3
<b>3.Math.M.1</b> Determine the perimeter and area of regular shapes using standard units.	Chapter 15: 15-1 through 15-4  • 15-1 Understand Area—pp. 312-313  • 15-2 Find Area Using Standard Units—pp. 314-315  • 15-3 Find the Area of a Rectangle and a Square—pp. 316-317  • 15-4 Find Area Using the Distributive Property—pp. 320-321  Chapter 16: 16-1 through 16-3  • 16-1 Understand Perimeter—pp. 332-333  • 16-2 Find Perimeter—pp. 334-335  • 16-3 Find Unknown Side Lengths—pp. 336-337
<b>3.Math.M.2</b> Describe what happens to measurements of a 2D shape, such as its perimeter and area, when the shape is changed in some way.	Chapter 16: 16-5 & 16-6  • 16-5 Same Perimeter, Different Areas—pp. 342-343  • 16-6 Same Area, Different Perimeters—pp. 344-345
<b>3.Math.M.3</b> Show how differences in units affect precision.	Chapter 11: 11-1 through 11-4  11-1 Measure Length—pp. 232-233  11-2 Estimate and Measure Liquid Volume—pp. 234-235  11-3 Operations with Liquid Volume—pp. 236-237  11-4 Estimate and Measure Mass—pp. 240-241
<b>3.Math.M.4</b> Solve problems involving perimeters of 2D shapes, including various non-regular polygons.	Chapter 16: 16-1 through 16-6  • 16-1 Understand Perimeter—pp. 332-333  • 16-2 Find Perimeter—pp. 334-335  • 16-3 Find Unknown Side Lengths—pp. 336-337  • 16-4 Problem Solving: Compare Strategies—pp. 340-341  • 16-5 Same Perimeter, Different Areas—pp. 342-343  • 16-6 Same Area, Different Perimeters—pp. 344-345

DATA ANALYSIS	
Third Grade Mathematics Standards	Sadlier Math, Grade 3
<b>3.Math.D.1</b> Compare different representations of the same data and evaluate how well each representation shows important aspects of the data.	Chapter 12: 12-1 through 12-5, 12-7 & 12-8  12-1 Read Picture Graphs—pp. 252-253  12-2 Make Picture Graphs—pp. 254-255  12-3 Read Bar Graphs—pp. 256-257  12-4 Make Bar Graphs—pp. 258-259  12-5 Data and Two-Step Problems—pp. 260-261  12-7 Read Line Plots—pp. 266-267  12-8 Make Line Plots—pp. 268-269
<b>3.Math.D.2</b> Describe events as likely or unlikely using words such as certain, equally likely, and impossible.	See Grade 6  Chapter 18: 18-3  • 18-3 Probability and Likelihood—online