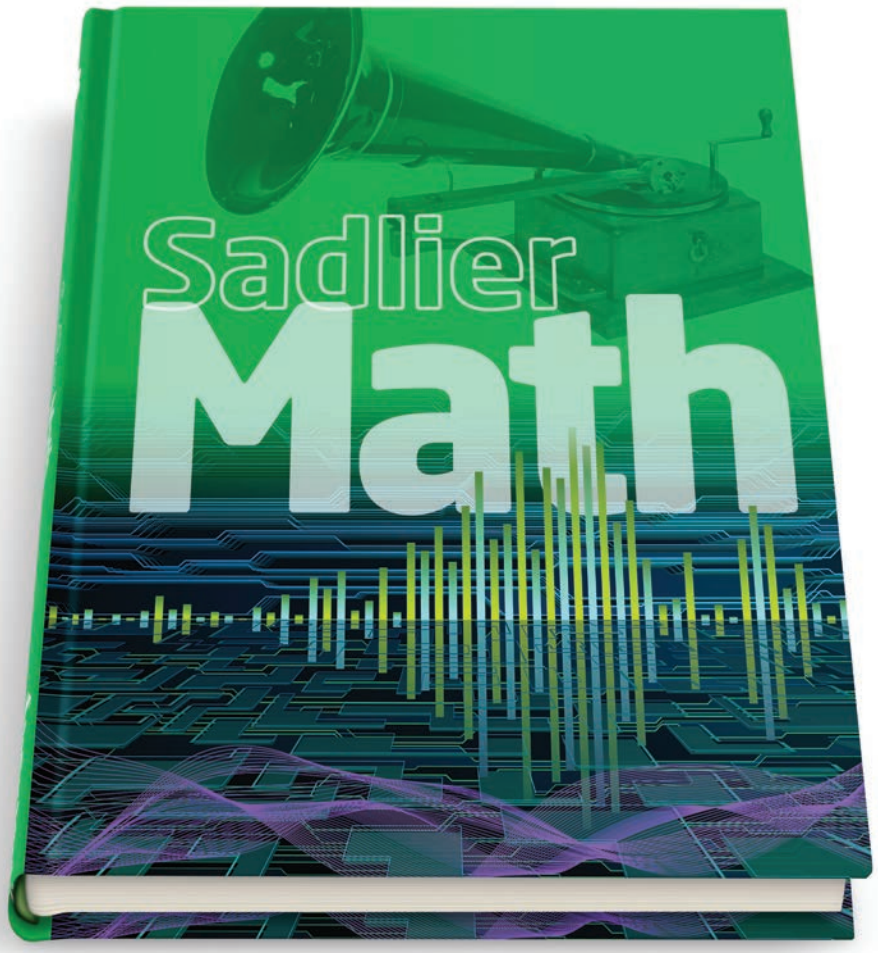
Sadlier Math™

Correlation to the South Carolina College- and Career-Ready Standards for Mathematics

Grade 3



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NUMBER SENSE AND BASE TEN

Grade 3 Content Standards	*Sadlier Math*, Grade 3
The student will:	
3.NSBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	**Chapter 1 Number Sense** • 1-4 Round Numbers to the Nearest Ten—pp. 10–11 • 1-5 Round Numbers to the Nearest Hundred—pp. 12–13
3.NSBT.2 Add and subtract whole numbers fluently to 1,000 using knowledge of place value and properties of operations.	**Chapter 2 Addition Within 1000** • 2-1 Use Addition Properties—pp. 22–23 • 2-3 Estimate Sums—pp. 26–27 • 2-4 Add with Partial Sums—pp. 30–31 • 2-5 Use Place Value to Add: Regroup Once—pp. 32–33 • 2-6 Use Place Value to Add: Regroup Twice—pp. 34–35 • 2-7 Add with Three or More Addends—pp. 36–37 **Chapter 3 Subtraction Within 1000** • 3-1 Estimate Differences—pp. 46–47 • 3-2 Relate Addition and Subtraction—pp. 48–49 • 3-3 Subtract with Partial Differences—pp. 50–51 • 3-4 Subtract Three-Digit Numbers—pp. 54–55 • 3-5 Subtract Across Zeros—pp. 56–57 • 3-6 Problem Solving: Write and Solve an Equation—pp. 58–59
3.NSBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10 – 90, using knowledge of place value and properties of operations.	**Chapter 5 Multiplication Facts** • 5-5 Multiply by 10—pp. 98–99 **Chapter 6 More Multiplication Facts** • 6-11 Multiply by Multiples of 10—pp. 134–135
3.NSBT.4 Read and write numbers through 999,999 in standard form and equations in expanded form.	**Chapter 1 Number Sense** • 1-1 Read and Write Multi-Digit Numbers—pp. 2–3
3.NSBT.5 Compare and order numbers through 999,999 and represent the comparison using the symbols >, =, or <.	**Chapter 1 Number Sense** • 1-3 Compare and Order Numbers—pp. 6–7

NUMBER SENSE — FRACTIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
The student will:	
3.NSF.1 Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers.	
a. A fraction $\frac{1}{b}$ (called a unit fraction) is the quantity formed by one part when a whole is partitioned into *b* equal parts;	**Chapter 9 Fraction Concepts** • 9-1 Understand Equal Parts—pp. 188–189 • 9-2 Name Unit Fractions of a Whole—pp. 190–191
b. A fraction $\frac{a}{b}$ is the quantity formed by *a* parts of size $\frac{1}{b}$;	**Chapter 9 Fraction Concepts** • 9-4 Name Fractions of a Whole—pp. 196–197
c. A fraction is a number that can be represented on a number line based on counts of a unit fraction;	**Chapter 9 Fraction Concepts** • 9-3 Find Unit Fractions on a Number Line—pp. 192–193 • 9-5 Find Fractions on a Number Line—pp. 198–199
d. A fraction can be represented using set, area, and linear models.	**Chapter 9 Fraction Concepts** • 9-1 Understand Equal Parts—pp. 188–189 • 9-2 Name Unit Fractions of a Whole—pp. 190–191 • 9-3 Find Unit Fractions on a Number Line—pp. 192–193 • 9-4 Name Fractions of a Whole—pp. 196–197 • 9-5 Find Fractions on a Number Line—pp. 198–199 • 9-7 Problem Solving: Use a Model—pp. 202–203
3.NSF.2 Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an understanding that:	
a. two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line;	**Chapter 10 Fractions: Comparison and Equivalence** • 10-2 Find Equivalent Fractions—pp. 212–213 • 10-3 Find Equivalent Fractions on a Number Line—pp. 214–215
b. fraction equivalence can be represented using set, area, and linear models;	**Chapter 10 Fractions: Comparison and Equivalence** • 10-2 Find Equivalent Fractions—pp. 212–213 • 10-3 Find Equivalent Fractions on a Number Line—pp. 214–215

NUMBER SENSE — FRACTIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
c. whole numbers can be written as fractions (e.g., $4 = \frac{4}{1}$ and $1 = \frac{4}{4}$);	**Chapter 10 Fractions: Comparison and Equivalence** • 10-1 Whole Numbers and Fractions—pp. 210–211
d. fractions with the same numerator or same denominator can be compared by reasoning about their size based on the same whole.	**Chapter 10 Fractions: Comparison and Equivalence** • 10-4 Compare Fractions with the Same Denominator—pp. 218–219 • 10-5 Compare Fractions with the Same Numerator—pp. 220–221
3.NSF.3 Develop an understanding of mixed numbers (i.e., denominators 2, 3, 4, 6, 8, 10) as iterations of unit fractions on a number line.	See Grade 4 **Chapter 10 Fraction Concepts** • 10-9 Mixed Numbers—pp. 210–211

ALGEBRAIC THINKING AND OPERATIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
The student will:	
3.ATO.1 Use concrete objects, drawings and symbols to represent multiplication facts of two single-digit whole numbers and explain the relationship between the factors (i.e., 0–10) and the product.	**Chapter 4 Multiplication and Division Concepts** • 4-1 Represent Multiplication as Repeated Addition—pp. 66–67 • 4-2 Represent Multiplication on a Number Line—pp. 68–69 • 4-3 Represent Multiplication as Arrays—pp. 70–71 • 4-4 Multiply with the Commutative Property—pp. 74–75 **Chapter 5 Multiplication Facts** • 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 10—pp. 96–97 • 5-5 Multiply by 10—pp. 98–99 • 5-6 Find Patterns in the Multiplication Table—pp. 100–101 • 5-7 Solve for Unknowns—pp. 102–103 • 5-8 Problem Solving: Use a Model—pp. 104–105 **Chapter 6 More Multiplication Facts** • 6-1 Break Apart to Multiply—pp. 112–113 • 6-2 Multiply by 3—pp. 114–115

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ALGEBRAIC THINKING AND OPERATIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
	• 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
3.ATO.2 Use concrete objects, drawings and symbols to represent division without remainders and explain the relationship among the whole number quotient (i.e., 0 – 10), divisor (i.e., 0 – 10), and dividend.	**Chapter 4 Multiplication and Division Concepts** • 4-5 Represent Division by Sharing—pp. 76–77 • 4-6 Represent Division by Repeated Subtraction—pp. 78–79 **Chapter 7 Division Facts** • 7-1 Relate Multiplication and Division—pp. 142–143 • 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 More Division Facts** • 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 • 8-7 Fact Families—pp. 176–177 • 8-8 Use Facts to Solve Problems—pp. 178–179
3.ATO.3 Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.	**Chapter 4 Multiplication and Division Concepts** • 4-1 Represent Multiplication as Repeated Addition—pp. 66–67 • 4-2 Represent Multiplication on a Number Line—pp. 68–69 • 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 • 4-6 Represent Division by Repeated Subtraction—pp. 78–79 • 4-7 Problem Solving: Write an Equation—pp. 80–81

ALGEBRAIC THINKING AND OPERATIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
	Chapter 5 Multiplication Facts • 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 10—pp. 96–97 • 5-5 Multiply by 10—pp. 98–99 • 5-7 Solve for Unknowns—pp. 102–103 • 5-8 Problem Solving: Use a Model—pp. 104–105 **Chapter 6 More Multiplication Facts** • 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 • 6-11 Multiply by Multiples of 10—pp. 134–135 **Chapter 7 Division Facts** • 7-1 Relate Multiplication and Division—pp. 142–143 • 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 More Division Facts** • 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 • 8-7 Fact Families—pp. 176–177 • 8-8 Use Facts to Solve Problems—pp. 178–179
3.ATO.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is a missing factor, product, dividend, divisor, or quotient.	**Chapter 5 Multiplication Facts** • 5-7 Solve for Unknowns—pp. 102–103 **Chapter 6 More Multiplication Facts** • 6-7 Use a Bar Model to Multiply—pp. 126–127 • 6-9 Use the Associative Property to Multiply—pp. 130–131 **Chapter 7 Division Facts** • 7-1 Relate Multiplication and Division—pp. 142–143 • 7-2 Divide by 2—pp. 144–145 *continued*

ALGEBRAIC THINKING AND OPERATIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
	• 7-3 Divide by 3—pp. 146–147 • 7-4 Divide by 4—pp. 150–151 • 7-5 Divide by 5—pp. 152–153
3.ATO.5 Apply properties of operations (i.e., Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property) as strategies to multiply and divide and explain the reasoning.	**Chapter 4 Multiplication and Division Concepts** • 4-4 Multiply with the Commutative Property—pp. 74–75 **Chapter 5 Multiplication Facts** • 5-4 Multiply by 1 and 10—pp. 96–97 **Chapter 6 More Multiplication Facts** • 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 **Chapter 8 More Division Facts** • 8-9 Use Order of Operations—pp. 180–181
3.ATO.6 Understand division as a missing factor problem.	**Chapter 7 Division Facts** • 7-1 Relate Multiplication and Division—pp. 142–143 • 7-2 Divide by 2—pp. 144–145 • 7-4 Divide by 4—pp. 150–151 • 7-5 Divide by 5—pp. 152–153 • 7-6 Problem Solving: Use Drawings to Solve Problems—pp. 154–155 **Chapter 8 More Division Facts** • 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 • 8-7 Fact Families—pp. 176–177 • 8-8 Use Facts to Solve Problems—pp. 178–179
3.ATO.7 Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100.	**Chapter 5 Multiplication Facts** • 5-1 Multiply by 2—pp. 88–89 • 5-2 Multiply by 5—pp. 90–91 • 5-3 Multiply by 9—pp. 92–93

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ALGEBRAIC THINKING AND OPERATIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
	• 5-4 Multiply by 1 and 10—pp. 96–97 • 5-5 Multiply by 10—pp. 98–99 • 5-6 Find Patterns in the Multiplication Table—pp. 100–101 • 5-7 Solve for Unknowns—pp. 102–103 **Chapter 6 More Multiplication Facts** • 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 Division Facts** • 7-1 Relate Multiplication and Division—pp. 142–143 • 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 More Division Facts** • 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 • 8-7 Fact Families—pp. 176–177 • 8-8 Use Facts to Solve Problems—pp. 178–179 • 8-9 Use Order of Operations—pp. 180–181
3.ATO.8 Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.	**Chapter 2 Addition Within 1000** • 2-8 Problem Solving: Use a Model—pp. 38–39 **Chapter 6 More Multiplication Facts** • 6-8 Problem Solving: Make a Table—pp. 128–129 **Chapter 8 More Division Facts** • 8-6 Problem Solving: Work Backward—pp. 174–175 **Chapter 11 Measurement** • 11-6 Problem Solving: Write an Equation—pp. 244–245 **Chapter 12 Data** • 12-5 Data and Two-Step Problems—pp. 260–261

ALGEBRAIC THINKING AND OPERATIONS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.ATO.9 Identify a rule for an arithmetic pattern (e.g., patterns in the addition table or multiplication table).	**Chapter 2 Addition Within 1000** • 2-2 Explore Addition Patterns—pp. 24–25 **Chapter 5 Multiplication Facts** • 5-5 Multiply by 10—pp. 98–99 • 5-6 Find Patterns in the Multiplication Table—pp. 100–101 **Chapter 6 More Multiplication Facts** • 6-10 Find More Multiplication Patterns—pp. 132–133

GEOMETRY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
The student will:	
3.G.1 Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	**Chapter 14 Two-Dimensional Shapes** • 14-1 Classify Polygons—pp. 294–295 • 14-2 Classify Quadrilaterals—pp. 296–297 • 14-3 Draw Quadrilaterals—pp. 298–299
3.G.2 Partition two-dimensional shapes into 2, 3, 4, 6, or 8 parts with equal areas and express the area of each part using the same unit fraction. Recognize that equal parts of identical wholes need not have the same shape.	**Chapter 9 Fraction Concepts** • 9-1 Understand Equal Parts—pp. 188–189 **Chapter 15 Area** • 15-2 Find Area Using Standard Units—pp. 314–315
3.G.3 Use a right angle as a benchmark to identify and sketch acute and obtuse angles.	Readiness **Chapter 14 Two-Dimensional Shapes** • 14-2 Classify Quadrilaterals (right angle)—pp. 296–297 See Grade 4 **Chapter 16 Lines and Angles** • 16-2 Angle Measure (right angle as a benchmark to identify acute and obtuse angles)—pp. 352–353

GEOMETRY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.G.4 Identify a three-dimensional shape (i.e., right rectangular prism, right triangular prism, pyramid) based on a given two-dimensional net and explain the relationship between the shape and the net.	See Grade 2 Readiness **Chapter 13 Geometry** • 13-3 Identify Three-Dimensional Shapes—pp. 565–568 See Grade 5 **Chapter 16 Volume** • 16-1 Solid Figures (nets)—pp. 360–361

MEASUREMENT AND DATA ANALYSIS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
The student will:	
3.MDA.1 Use analog and digital clocks to determine and record time to the nearest minute, using *a.m.* and *p.m.*; measure time intervals in minutes; and solve problems involving addition and subtraction of time intervals within 60 minutes.	**Chapter 13 Time** • 13-1 Tell Time to the Minute—pp. 276–277 • 13-2 Measure Elapsed Time—pp. 278–279 • 13-3 Find Start and End Times—pp. 282–283 • 13-4 Operations with Time—pp. 284–285
3.MDA.2 Estimate and measure liquid volumes (capacity) in customary units (i.e., c., pt., qt., gal.) and metric units (i.e., mL, L) to the nearest whole unit.	**Chapter 11 Measurement** • 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 • 11-5 Operations with Mass—pp. 242–243
3.MDA.3 Collect, organize, classify, and interpret data with multiple categories and draw a scaled picture graph and a scaled bar graph to represent the data.	**Chapter 12 Data** • 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
3.MDA.4 Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units.	**Chapter 11 Measurement** • 11-1 Measure Length—pp. 232–233 **Chapter 12 Data** • 12-7 Read Line Plots—pp. 266–267 • 12-8 Make Line Plots—pp. 268–269

MEASUREMENT AND DATA ANALYSIS

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.MDA.5 Understand the concept of area measurement.	
a. Recognize area as an attribute of plane figures;	**Chapter 15 Area** • 15-1 Understand Area—pp. 312–313
b. Measure area by building arrays and counting standard unit squares;	**Chapter 15 Area** • 15-2 Find Area Using Standard Units—pp. 314–315 • 15-3 Find the Area of a Rectangle and a Square—pp. 316–317
c. Determine the area of a rectilinear polygon and relate to multiplication and addition.	**Chapter 15 Area** • 15-4 Find Area Using the Distributive Property—pp. 320–321 • 15-5 Find Area of Composite Shapes—pp. 322–323
3.MDA.6 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	**Chapter 16 Perimeter** • 16-1 Understand Perimeter—pp. 332–333 • 16-2 Find Perimeter—pp. 334–335 • 16-3 Find Unknown Side Lengths—pp. 336–337 • 16-5 Same Perimeter, Different Areas—pp. 342–343 • 16-6 Same Area, Different Perimeter—pp. 344–345