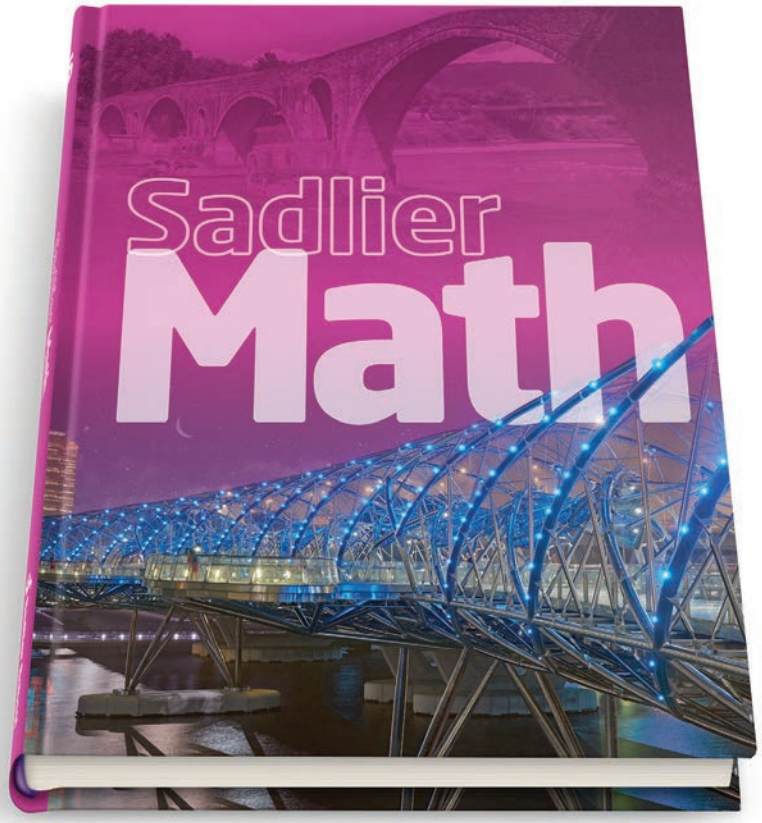
Sadlier Math™

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

Grade 6



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NUMBER

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.N.1 Use a number line to locate, describe, and compare rational and irrational numbers.	**Chapter 9: 9-1 through 9-11** • 9-1 Integers on the Number Line—pp. 196–197 • 9-2 Integers in the Real World—pp. 198–199 • 9-3 Compare and Order Integers—pp. 200–201 • 9-4 Absolute Value as Magnitude—pp. 202–203 • 9-5 Rational Numbers—pp. 204–205 • 9-6 Compare and Order Rational Numbers—pp. 206–207 *Irrational numbers not addressed at this level.
6-8.Math.N.2 Solve real-world problems using fractions, decimals and percents.	**Chapter 1: 1-1 through 1-6** • 1-1 Estimate Decimal Sums and Differences—pp. 2–3 • 1-2 Add Decimals—pp. 4–5 • 1-3 Subtract Decimals—pp. 6–7 • 1-4 Write Addition and Subtraction Expressions—pp. 10–11 • 1-5 Evaluate Addition and Subtraction Expressions—pp. 12–13 • 1-6 Problem Solving: The Four-Step Process—pp. 14–15 **Chapter 2: 2-1 through 2-6** • 2-1 Multiply Decimals by 0.1, 0.01, and 0.001—pp. 22–23 • 2-2 Estimate Decimal Products—pp. 24–25 • 2-3 Multiply with Decimals—pp. 26–27 • 2-4 Write Multiplication Expressions—pp. 30–31 • 2-5 Evaluate Multiplication Expressions—pp. 32–33 • 2-6 Problem Solving: Compare Strategies—pp. 34–35 **Chapter 3: 3-2 through 3-8** • 3-2 Divide Decimals by 10, 100, and 1000—pp. 44–45 • 3-3 Divide Decimals by Whole Numbers—pp. 46–47 • 3-4 Divide Decimals by 0.1, 0.01, and 0.001—pp. 50–51 • 3-5 Estimate Decimal Quotients—pp. 52–53 • 3-6 Decimal Divisors—pp. 54–55 • 3-7 Zeros in Division—pp. 56–57 • 3-8 Write Division Expressions—pp. 58–59 • 3-9 Evaluate Division Expressions—pp. 60–61 • 3-10 Problem Solving: Use Logical Reasoning—pp. 62–63 **Chapter 7: 7-5 through 7-7** • 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153 • 7-6 Addition and Subtraction Equations with Fractions—pp. 154–155 • 7-7 Problem Solving: Choose a Strategy—pp. 156–157 **Chapter 8: 8-9 through 8-12** • 8-9 Fractions with Money—pp. 182–183 • 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185 • 8-11 Multiplication and Division Equations with Fractions—pp. 186–187 • 8-12 Problem Solving: Use a Model—pp. 188–189 **Chapter 11: 11-1, 11-7 through 11-10** • 11-1 Percent—pp. 254–255 • 11-7 Find the Part—pp. 268–269 • 11-8 Find the Percent—pp. 270–271 • 11-9 Find the Whole—pp. 272–273 • 11-10 Problem Solving: Act it Out—pp. 274–275

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NUMBER

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.N.3 Describe and explain percents greater than 100 and less than 1.	**Chapter 11: 11-5 & 11-6** • 11-5 Percents Greater Than 100%—pp. 262–263 • 11-6 Percents Less Than 1%—pp. 264–265
6-8.Math.N.4 Develop models to compare relationships among percents, fractions, and decimals.	**Chapter 11: 11-2 through 11-4** • 11-2 Relate Percents to Fractions—pp. 256–257 • 11-3 Relate Percents to Decimals—pp. 258–259 • 11-4 Relate Decimals, Fractions, and Percents—pp. 260–261
6-8.Math.N.5 Recognize, represent, and perform operations with numbers in standard, exponential, scientific, and expanded forms.	**Chapter 1: 1-2 through 1-5** • 1-2 Add Decimals—pp. 4–5 • 1-3 Subtract Decimals—pp. 6–7 • 1-4 Write Addition and Subtraction Expressions—pp. 10–11 • 1-5 Evaluate Addition and Subtraction Expressions—pp. 12–13 **Chapter 2: 2-1, 2-3 through 2-5** • 2-1 Multiply Decimals by 0.1, 0.01, and 0.001—pp. 22–23 • 2-3 Multiply with Decimals—pp. 26–27 • 2-4 Write Multiplication Expressions—pp. 30–31 • 2-5 Evaluate Multiplication Expressions—pp. 32–33 **Chapter 3: 3-1 through 3-4, 3-8 & 3-9** • 3-1 Divide Whole Numbers—pp. 42–43 • 3-2 Divide Decimals by 10, 100, and 1000—pp. 44–45 • 3-3 Divide Decimals by Whole Numbers—pp. 46–47 • 3-4 Divide Decimals by 0.1, 0.01, and 0.001—pp. 50–51 • 3-8 Write Division Expressions—pp. 58–59 • 3-9 Evaluate Division Expressions—pp. 60–61 **Chapter 4: 4-1, 4-2, 4-5 through 4-7** • 4-1 Exponents—pp. 70–71 • 4-2 Order of Operations—pp. 72–73 • 4-5 Translate Expressions Involving Exponents—pp. 78–79 • 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83 • 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85 **Chapter 5: 5-2, 5-3 & 5-9** • 5-2 Addition and Subtraction Equations—pp. 100–101 • 5-3 Multiplication and Division Equations—pp. 102–103 • 5-9 Problem Solving: Write and Solve an Equation—pp. 116–117 **Chapter 7: 7-5 & 7-6** • 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153 • 7-6 Addition and Subtraction Equations with Fractions—pp. 154–155 **Chapter 8: 8-1, 8-5, 8-7, 8-10 & 8-11** • 8-1 Multiply Fractions—pp. 164–165 • 8-5 Divide Fractions by Fractions—pp. 172–173 • 8-7 Divide with Whole and Mixed Numbers—pp. 176–177 • 184–185 • 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185 • 8-11 Multiplication and Division Equations with Fractions—pp. 186–187 *continued*

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NUMBER

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
	See also Grade 5 **Chapter 1: 1-2** • 1-2 Expanded Form—pp. 4–5 **Chapter 2: 2-2** • 2-2 Decimals and Expanded Form—pp. 26–27 *Scientific notation not addressed at this level.
6-8.Math.N.6 Compare the effects of using arithmetic operations with rational numbers.	See related content (readiness) **Chapter 9: 9-5** • 9-5 Rational Numbers—pp. 204–205
6-8.Math.N.7 Simplify computations with rational numbers through the use of the associative and commutative properties of addition and multiplication and the distributive property of multiplication.	**Chapter 1: 1-4** • 1-4 Write Addition and Subtraction Expressions—pp. 10–11 **Chapter 4: 4-6 through 4-8, 4-10** • 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83 • 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85 • 4-8 Identify Equivalent Expressions—pp. 86–87 • 4-10 Problem Solving: Represent the Situation (use commutative and associative properties)—pp. 90–91 **Chapter 5: 5-4** • 5-4 Write and Solve Equations (commutative property)—pp. 104–105 **Chapter 6: 6-3** • 6-3 The Distributive Property and Common Factors—pp. 128–129 **Chapter 7: 7-5** • 7-5 Addition and Subtraction Expressions with Fractions (associative and commutative properties)—pp. 152–153 **Chapter 8: 8-2** • 8-2 Properties of Multiplication—pp. 166–167
6-8.Math.N.8 Use inverse relationships: addition and subtraction, multiplication and division, squaring and finding square roots, cubing and finding cube roots, to simplify computations and solve problems.	**Chapter 5: 5-2 & 5-3** • 5-2 Addition and Subtraction Equations—pp. 100–101 • 5-3 Multiplication and Division Equations—pp. 102–103 **Chapter 8: 8-2** • 8-2 Properties of Multiplication—pp. 166–167 *Square and cube roots not addressed at this level.

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NUMBER

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.N.9 Select appropriate methods and tools for computing with rational numbers from among mental computation, estimation, technology application, and paper and pencil, depending on the situation, and apply the selected methods.	**Chapter 1: 1-1** • 1-1 Estimate Decimal Sums and Differences—pp. 2–3 **Chapter 2: 2-2** • 2-2 Estimate Decimal Products—pp. 24–25 **Chapter 3: 3-5 & 3-10** • 3-5 Estimate Decimal Quotients—pp. 52–53 • 3-10 Problem Solving: Use Logical Reasoning—pp. 62–63 **Chapter 5: 5-3** • 5-3 Multiplication and Division Equations (estimating)—pp. 102–103 **Chapter 8: 8-6** • 8-6 Estimate Quotients of Fractions and Mixed Numbers—pp. 174–175
6-8.Math.N.10 Develop and use strategies of estimation to determine the reasonableness of the results of rational-number computations.	
6-8.Math.N.11 Recognize proportionality and use ratios and proportions to represent unknowns in quantitative relationships.	**Chapter 10: 10-8 & 10-9** • 10-8 Equations for Proportional Relationships—pp. 242–243 • 10-9 Graphs of Proportional Relationships—pp. 244–245
6-8.Math.N.12 Analyze real world situations to determine proportionality, and solve using multiple methods such as scaling, finding equivalent ratios, and using the means-extremes property.	**Chapter 10: 10-1 through 10-10** • 10-1 Ratios—pp. 226–227 • 10-2 Tables of Equivalent Ratios—pp. 228–229 • 10-3 Tape Diagrams—pp. 230–231 • 10-4 Double Number Lines—pp. 232–233 • 10-5 Compare Ratios—pp. 236–237 • 10-6 Rates and Unit Rates—pp. 238–239 • 10-7 Compare Prices—pp. 240–241 • 10-8 Equations for Proportional Relationships—pp. 242–243 • 10-9 Graphs of Proportional Relationships—pp. 244–245

ALGEBRA

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.A.1 Identify and describe different purposes for variables in mathematics.	**Chapter 5: 5-1 through 5-9** • 5-1 Solutions of Equations—pp. 98–99 • 5-2 Addition and Subtraction Equations—pp. 100–101 • 5-3 Multiplication and Division Equations—pp. 102–103 • 5-4 Write and Solve Equations—pp. 104–105 • 5-5 Inequalities—pp. 108–109 • 5-6 Solutions of Inequalities—pp. 110–111 • 5-7 Write Inequalities—pp. 112–113 • 5-8 Solve Inequalities—pp. 114–115 • 5-9 Problem Solving: Write and Solve an Equation—pp. 116–117

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ALGEBRA

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.A.2 Write and use algebraic equations and inequalities in order to represent situations and solve problems involving linear relationships.	**Chapter 5: 5-1 through 5-9** • 5-1 Solutions of Equations—pp. 98–99 • 5-2 Addition and Subtraction Equations—pp. 100–101 • 5-3 Multiplication and Division Equations—pp. 102–103 • 5-4 Write and Solve Equations—pp. 104–105 • 5-5 Inequalities—pp. 108–109 • 5-6 Solutions of Inequalities—pp. 110–111 • 5-7 Write Inequalities—pp. 112–113 • 5-8 Solve Inequalities—pp. 114–115 • 5-9 Problem Solving: Write and Solve an Equation—pp. 116–117
6-8.Math.A.3 Identify functions as linear or nonlinear, and contrast their properties in tables, graphs, or equations. **6-8.Math.A.4** Identify linear functions as proportional or nonproportional and describe the difference. **6-8.Math.A.5** Identify and describe relationships among equations, graphs, and tables of a function.	*Functions not addressed at this level.
6-8.Math.A.6 Interpret the specific meaning of intercepts and slopes on graphs used in real world problems.	*Intercepts and slopes not addressed at this level.
6-8.Math.A.7 Apply properties of integer exponents to numerical and algebraic expressions.	**Chapter 4: 4-1 through 4-5** • 4-1 Exponents—pp. 70–71 • 4-2 Order of Operations—pp. 72–73 • 4-3 Parts of Expressions—pp. 74–75 • 4-4 Translate Expressions—pp. 76–77 • 4-5 Translate Expressions Involving Exponents—pp. 78–79
6-8.Math.A.8 Identify and create equivalent forms for algebraic expressions.	**Chapter 1: 1-4 & 1-5** • 1-4 Write Addition and Subtraction Expressions—pp. 10–11 • 1-5 Evaluate Addition and Subtraction Expressions—pp. 12–13 **Chapter 2: 2-4 & 2-5** • 2-4 Write Multiplication Expressions—pp. 30–31 • 2-5 Evaluate Multiplication Expressions—pp. 32–33 **Chapter 3: 3-8 & 3-9** • 3-8 Write Division Expressions—pp. 58–59 • 3-9 Evaluate Division Expressions—pp. 60–61 **Chapter 4: 4-6 through 4-8** • 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83 • 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85 • 4-8 Identify Equivalent Expressions—pp. 86–87

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ALGEBRA

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.A.9 Model and solve real-world problems using various representations, such as graphs, tables, and equations.	**Chapter 4: 4-1 through 4-10** • 4-1 Exponents—pp. 70–71 • 4-2 Order of Operations—pp. 72–73 • 4-3 Parts of Expressions—pp. 74–75 • 4-4 Translate Expressions—pp. 76–77 • 4-5 Translate Expressions Involving Exponents—pp. 78–79 • 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83 • 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85 • 4-8 Identify Equivalent Expressions—pp. 86–87 • 4-9 Use Formulas—pp. 88–89 • 4-10 Problem Solving: Represent the Situation—pp. 90–91 **Chapter 5: 5-1 through 5-9** • 5-1 Solutions of Equations—pp. 98–99 • 5-2 Addition and Subtraction Equations—pp. 100–101 • 5-3 Multiplication and Division Equations—pp. 102–103 • 5-4 Write and Solve Equations—pp. 104–105 • 5-5 Inequalities—pp. 108–109 • 5-6 Solutions of Inequalities—pp. 110–111 • 5-7 Write Inequalities—pp. 112–113 • 5-8 Solve Inequalities—pp. 114–115 • 5-9 Problem Solving: Write and Solve an Equation—pp. 116–117 **Chapter 7: 7-5 through 7-7** • 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153 • 7-6 Addition and Subtraction Equations with Fractions—pp. 154–155 • 7-7 Problem Solving: Choose a Strategy—pp. 156–157 **Chapter 8: 8-10 through 8-12** • 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185 • 8-11 Multiplication and Division Equations with Fractions—pp. 186–187 • 8-12 Problem Solving: Use a Model—pp. 188–189 **Chapter 10: 10-2 through 10-4, 10-8 through 10-10** • 10-2 Tables of Equivalent Ratios—pp. 228–229 • 10-3 Tape Diagrams—pp. 230–231 • 10-4 Double Number Lines—pp. 232–233 • 10-8 Equations for Proportional Relationships—pp. 242–243 • 10-9 Graphs of Proportional Relationships—pp. 244–245 • 10-10 Problem Solving: Make a Table—pp. 246–247 **Chapter 13: 13-2 through 13-4** • 13-2 Relationships in Words and Tables—pp. 300–301 • 13-3 Relationships in Equations and Graphs—pp. 302–303 • 13-4 Multiple Representations of a Relationship—pp. 306–307 **Chapter 17: 17-1 through 17-6** • 17-1 Dot Plots—pp. 378–379 • 17-2 Box Plots—pp. 380–381 • 17-3 Histograms—pp. 382–383 • 17-4 Data Distributions—pp. 386–387 • 17-5 Interpret Circle Graphs—pp. 388–389 • 17-6 Problem Solving: Compare Models—pp. 390–391 **Chapter 18: 18-8** • 18-8 Problem Solving: Make an Organized List—online

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ALGEBRA

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.A.10 Use various algebraic methods to solve systems of equations.	*Systems of equations not addressed at this level.

GEOMETRY

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.G.1 Describe, classify, and recognize relationships among types of 2D and 3D objects using their defining properties.	See Grade 5 **Chapter 15: 15-1 through 15-5** • 15-1 Polygons—pp. 342–343 • 15-2 Triangles—pp. 344–345 • 15-3 Quadrilaterals—pp. 348–349 • 15-4 Classify Quadrilaterals—pp. 350–351 • 15-5 Problem Solving: Use a Model—pp. 352–353 **Chapter 16: 16-1 through 16-6** • 16-1 Solid Figures—pp. 360–361
6-8.Math.G.2 Determine relationships among the angles, side lengths, perimeters, areas, surface areas and volumes of similar objects.	*Similar objects not addressed at this level.
6-8.Math.G.3 Create and critique inductive and deductive arguments concerning geometric ideas and relationships, including congruence, similarity, and the Pythagorean theorem.	*Congruence, similarity, and the Pythagorean Theorem not addressed at this level.
6-8.Math.G.4 Use coordinate geometry to represent and describe the properties of geometric shapes, including regular polygons and those with pairs of parallel or perpendicular sides.	**Chapter 9: 9-7 & 9-10** • 9-7 Plot Points in the Coordinate Plane—pp. 210–211 • 9-10 Plot Polygons—pp. 216–217
6-8.Math.G.5 Translate, reflect, rotate, and dilate objects in the coordinate plane.	See related content (readiness) **Chapter 9: 9-7 & 9-8** • 9-7 Plot Points in the Coordinate Plane—pp. 210–211 • 9-8 Reflections of Points—pp. 212–213 *Transformations in the coordinate plane not addressed at this level.
6-8.Math.G.6 Explain the congruence, similarity, and line or rotational symmetry of objects using transformations.	See Grade 4 related content (readiness) **Chapter 17: 17-4** • 17-4 Symmetry—pp. 376–377 *Congruence, similarity, and line or rotational symmetry using transformations not addressed at this level.

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GEOMETRY

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.G.7 Draw geometric objects with specified properties, such as side lengths or angle measures.	See Grade 5 **Chapter 15: 15-1 through 15-5** • 15-1 Polygons—pp. 342–343 • 15-2 Triangles—pp. 344–345 • 15-3 Quadrilaterals—pp. 348–349
6-8.Math.G.8 Solve problems, such as those involving area, surface area, and volume, by composing/decomposing and by using 2D representations of 3D objects.	**Chapter 14: 14-1 through 14-7** • 14-1 Areas of Parallelograms and Rhombuses—pp. 316–317 • 14-2 Areas of Triangles—pp. 318–319 • 14-3 Areas of Trapezoids—pp. 320–321 • 14-4 Circumferences and Areas of Circles—pp. 324–325 • 14-5 Areas of Regular Polygons—pp. 326–327 • 14-6 Areas of Composite Figures—pp. 328–329 • 14-7 Problem Solving: Find a Pattern—pp. 330–331 **Chapter 15: 15-1 through 15-6** • 15-1 Nets of Three-Dimensional Figures—pp. 338–339 • 15-2 Use Nets to Find Surface Areas of Prisms—pp. 340–341 • 15-3 Use Nets to Find Surface Areas of Pyramids—pp. 342–343 • 15-4 Use Cubes to Find Volumes—pp. 346–347 • 15-5 Volumes of Right Rectangular Prisms—pp. 348–349 • 15-6 Problem Solving: More Than One Way—pp. 350–351
6-8.Math.G.9 Create and use geometric models to represent and explain numerical and algebraic relationships, such as the solving of systems of equations.	**Chapter 13: 13-1 through 13-4** • 13-1 Related Quantities—pp. 298–299 • 13-2 Relationships in Words and Tables—pp. 300–301 • 13-3 Relationships in Equations and Graphs—pp. 302–303 • 13-4 Multiple Representations of a Relationship—pp. 306–307
6-8.Math.G.10 Apply relationships among angles: supplementary, complementary, vertical, adjacent angles, alternate (interior and exterior) angles, and corresponding, in real-world situations and mathematical problems.	*Relationships among angles not addressed at this level.
6-8.Math.G.11 Recognize and apply geometric ideas and relationships in areas such as art, science, and everyday life.	**Chapter 14: 14-1 through 14-7** • 14-1 Areas of Parallelograms and Rhombuses—pp. 316–317 • 14-2 Areas of Triangles—pp. 318–319 • 14-3 Areas of Trapezoids—pp. 320–321 • 14-4 Circumferences and Areas of Circles—pp. 324–325 • 14-5 Areas of Regular Polygons—pp. 326–327 • 14-6 Areas of Composite Figures—pp. 328–329 • 14-7 Problem Solving: Find a Pattern—pp. 330–331 **Chapter 15: 15-1 through 15-6** • 15-1 Nets of Three-Dimensional Figures—pp. 338–339 • 15-2 Use Nets to Find Surface Areas of Prisms—pp. 340–341 • 15-3 Use Nets to Find Surface Areas of Pyramids—pp. 342–343 • 15-4 Use Cubes to Find Volumes—pp. 346–347 • 15-5 Volumes of Right Rectangular Prisms—pp. 348–349 • 15-6 Problem Solving: More Than One Way—pp. 350–351

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MEASUREMENT

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.M.1 Select appropriate methods for estimating measurements.	See Grade 5 **Chapter 14: 14-5** • 14-5 Relate Metric Units of Length (Develop Concepts: estimate centimeter)—TE p. 326A **Chapter 16: 16-1 & 16-6** • 16-3 Volume of Rectangular Prisms (Develop Concepts: estimate cubic measure)—TE p. 364A • 16-6 Problem Solving: Act It Out (Workbook: estimate area, volume)—pp. 372–373 **Chapter 17: 17-7** • 17-7 Problem Solving: Find and Use a Pattern (estimate weight, height)—pp. 394–395
6-8.Math.M.2 Convert from one unit to another within the same system, both metric and customary.	**Chapter 12: 12-1 through 12-4** • 12-1 Convert Customary Units—pp. 282–283 • 12-2 Convert Metric Units—pp. 284–285 • 12-4 Problem Solving: Choose a Strategy—pp. 290–291 See also related content (extension) **Chapter 12: 12-3** • 12-3 Convert Between Customary and Metric Units—pp. 288–289
6-8.Math.M.3 Select and use units of appropriate size and type to measure angles, perimeter, area, surface area, and volume.	**Chapter 15: 15-1 through 15-6** • 15-1 Nets of Three-Dimensional Figures—pp. 338–339 • 15-2 Use Nets to Find Surface Areas of Prisms—pp. 340–341 • 15-3 Use Nets to Find Surface Areas of Pyramids—pp. 342–343 • 15-4 Use Cubes to Find Volumes—pp. 346–347 • 15-5 Volumes of Right Rectangular Prisms—pp. 348–349 • 15-6 Problem Solving: More Than One Way—pp. 350–351 See also Grade 4 **Chapter 16: 16-2 through 16-4** • 16-2 Angle Measure—pp. 352–353 • 16-3 Measure Angles—pp. 356–357 • 16-4 Unknown Angle Measures—pp. 358–359 **Chapter 17: 17-6 & 17-7** • 17-6 Use Perimeter Formulas—pp. 382–383 • 17-7 Use Area Formulas—pp. 384–385
6-8.Math.M.4 Select and apply techniques and tools to accurately find length, area, volume, and angle measures to appropriate levels of precision.	See Grade 4 **Chapter 14: 14-1 through 14-3, 14-5 through 14-7** • 14-1 Measure with Inches—pp. 296–297 • 14-2 Customary Units of Length—pp. 298–299 • 14-3 Customary Units of Capacity—pp. 300–301 • 14-5 Operations with Customary Units—pp. 304–305 • 14-6 Metric Units of Length—pp. 308–311 • 14-7 Metric Units of Capacity—pp. 310–313 **Chapter 16: 16-2 through 16-4** • 16-2 Angle Measure—pp. 352–353 • 16-3 Measure Angles—pp. 356–357 • 16-4 Unknown Angle Measures—pp. 358–359 *continued*

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MEASUREMENT

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
	See Grade 5 **Chapter 14: 14-1, 14-2, 14-5 & 14-6** • 14-1 Relate Customary Units of Length—pp. 316–317 • 14-2 Relate Customary Units of Capacity—pp. 318–319 • 14-5 Relate Metric Units of Length—pp. 326–327 • 14-6 Relate Metric Units of Capacity—pp. 328–329
6-8.Math.M.5 Develop and use formulas to determine the circumference of circles and the area of triangles, parallelograms, trapezoids, and circles and develop strategies to find the area of more-complex 2D shapes.	**Chapter 14: 14-1 through 14-7** • 14-1 Areas of Parallelograms and Rhombuses—pp. 316–317 • 14-2 Areas of Triangles—pp. 318–319 • 14-3 Areas of Trapezoids—pp. 320–321 • 14-4 Circumferences and Areas of Circles—pp. 324–325 • 14-5 Areas of Regular Polygons—pp. 326–327 • 14-6 Areas of Composite Figures—pp. 328–329 • 14-7 Problem Solving: Find a Pattern—pp. 330–331
6-8.Math.M.6 Develop strategies to determine the surface area and volume of selected prisms, pyramids, cylinders, cones, and spheres.	**Chapter 15: 15-1 through 15-6** • 15-1 Nets of Three-Dimensional Figures—pp. 338–339 • 15-2 Use Nets to Find Surface Areas of Prisms—pp. 340–341 • 15-3 Use Nets to Find Surface Areas of Pyramids—pp. 342–343 • 15-4 Use Cubes to Find Volumes—pp. 346–347 • 15-5 Volumes of Right Rectangular Prisms—pp. 348–349 • 15-6 Problem Solving: More Than One Way—pp. 350–351
6-8.Math.M.7 Solve problems involving scale factors, using ratios and proportions.	**Chapter 10: 10-1 through 10-7** • 10-1 Ratios—pp. 226–227 • 10-2 Tables of Equivalent Ratios—pp. 228–229 • 10-3 Tape Diagrams—pp. 230–231 • 10-4 Double Number Lines—pp. 232–233 • 10-5 Compare Ratios—pp. 236–237 • 10-6 Rates and Unit Rates—pp. 238–239 • 10-7 Compare Prices—pp. 240–241 **Chapter 12: 12-1 through 12-4** • 12-1 Convert Customary Units—pp. 282–283 • 12-2 Convert Metric Units—pp. 284–285 • 12-3 Convert Between Customary and Metric Units—pp. 288–289 • 12-4 Problem Solving: Choose a Strategy—pp. 290–291
6-8.Math.M.8 Solve problems involving rates and derived measurements for such attributes as velocity and density.	**Chapter 2: 2-6** • 2-6 Problem Solving: Compare Strategies (price per hour)—pp. 34–35 **Chapter 10: 10-6 & 10-7** • 10-6 Rates and Unit Rates—pp. 238–239 • 10-7 Compare Prices—pp. 240–241 **Chapter 12: 12-1 through 12-4** • 12-1 Convert Customary Units—pp. 282–283 • 12-2 Convert Metric Units—pp. 284–285 • 12-3 Convert Between Customary and Metric Units—pp. 288–289 • 12-4 Problem Solving: Choose a Strategy—pp. 290–291

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DATA ANALYSIS AND PROBABILITY

6–8 Mathematics Standards	*Sadlier Math*, Grade 6
6-8.Math.D.1 Select, create, and use appropriate graphical representations of data, including histograms, box plots, dot (or line) plots, stem-and-leaf plots, and scatterplots.	**Chapter 17: 17-1 through 17-6** • 17-1 Dot Plots—pp. 378–379 • 17-2 Box Plots—pp. 380–381 • 17-3 Histograms—pp. 382–383 • 17-4 Data Distributions—pp. 386–387 • 17-5 Interpret Circle Graphs—pp. 388–389 • 17-6 Problem Solving: Compare Models—pp. 390–391 *Stem-and-leaf plots and scatterplots not addressed at this level.
6-8.Math.D.2 Find, use, and interpret measures of center and spread, including mean, median, mode, range and interquartile range.	**Chapter 16: 16-2 through 16-5** • 16-2 Measures of Center—pp. 360–361 • 16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363 • 16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367 • 16-5 Analyze Data—pp. 368–369
6-8.Math.D.3 Describe and discuss the correspondence between data sets and their graphical representations.	**Chapter 17: 17-1 through 17-6** • 17-1 Dot Plots—pp. 378–379 • 17-2 Box Plots—pp. 380–381 • 17-3 Histograms—pp. 382–383 • 17-4 Data Distributions—pp. 386–387 • 17-5 Interpret Circle Graphs—pp. 388–389 • 17-6 Problem Solving: Compare Models—pp. 390–391
6-8.Math.D.4 Use observations about differences between two or more samples to make conjectures about the populations from which the samples were taken.	**Chapter 18: 18-1 & 18-2** • 18-1 Populations and Samples—online • 18-2 Drawing Conclusions from Samples—online
6-8.Math.D.5 Form opinions about possible relationships between two characteristics of a sample on the basis of the scatterplot of the data and the approximate lines of fit.	*Scatterplots not addressed at this level.
6-8.Math.D.6 Identify events as complementary, independent, dependent, and mutually exclusive and describe what that means in the context of the data.	*Complementary, independent, dependent, and mutually exclusive events not addressed at this level.
6-8.Math.D.7 Compute probabilities for simple and compound events, using such methods as organized lists, tree diagrams, and area models.	**Chapter 18: 18-3 through 18-8** • 18-3 Probability and Likelihood—online • 18-4 Theoretical Probability—online • 18-5 Relative Frequency and Experimental Probability—online • 18-6 Uniform Probability Models—online • 18-7 Non-Uniform Probability Models—online • 18-8 Problem Solving: Make an Organized List—online

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