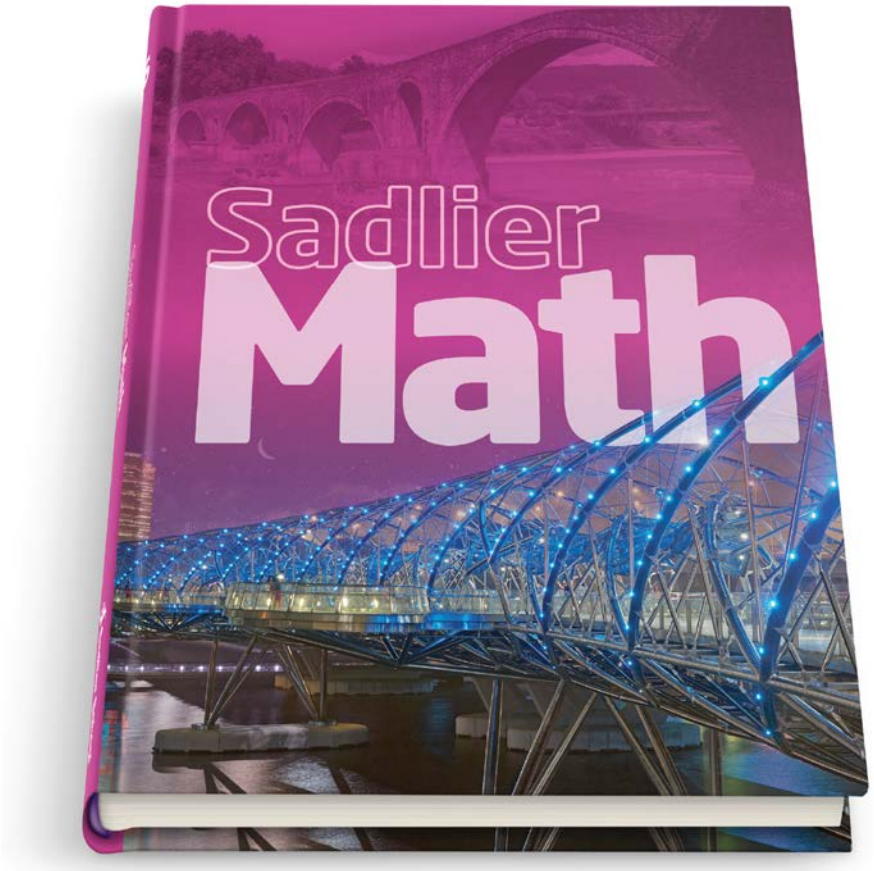
Sadlier Math™

Correlation to the Archdiocese of Cincinnati 2020 Graded Course of Study for Mathematics

Grade 6



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STANDARD 1 – RATIO AND PROPORTIONAL RELATIONSHIP (RP)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.RP.6.1 Understand ratio concepts and use ratio reasoning to solve problems.	
M.RP.6.1.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	**Chapter 10 Ratios and Proportional Relationships** 10-1 Ratios—pp. 226–227
M.RP.6.1.2 Understand the concept of a unit rate a/b associated with a ratio with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship.	**Chapter 10 Ratios and Proportional Relationships** 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
M.RP.6.1.3 Use ratio and rate reasoning to solve real-world and mathematical problems.	**Chapter 10 Ratios and Proportional Relationships** 10-3 Tape Diagrams—pp. 230–231 10-4 Double Number Lines—pp. 232–233
M.RP.6.1.4 Make tables of equivalent ratios relating quantities with whole number measurements; find missing values in the tables; and plot the pairs of values on the coordinate plans. Use tables to compare ratios.	**Chapter 10 Ratios and Proportional Relationships** 10-2 Tables of Equivalent Ratios—pp. 228–229 10-5 Compare Ratios—pp. 236–237 10-7 Compare Prices—pp. 240–241 10-9 Graphs of Proportional Relationships—pp. 244–245 10-10 Problem Solving: Make a Table—pp. 246–247
M.RP.6.1.5 Solve unit rate problems including those involving unit pricing and constant speed.	**Chapter 10 Ratios and Proportional Relationships** 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
M.RP.6.1.6 Find a percent of a quantity as a rate per 100, e.g., 30% of a quantity means 30/100 times the quantity; solve problems involving finding the whole, given a part and the percent.	**Chapter 11 Percent** 11-1 Percent—pp. 254–255 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

continued

STANDARD 1 – RATIO AND PROPORTIONAL RELATIONSHIP (RP)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.RP.6.1 Understand ratio concepts and use ratio reasoning to solve problems.	
	11-5 Percents Greater Than 100%—pp. 262–263 11-6 Percents Less Than 1%—pp. 264–265 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
M.RP.6.1.7 Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or diving quantities.	**Chapter 12 Measurement** 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

STANDARD 2 – THE NUMBER SYSTEM (NS)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.NS.6.1 Apply and extend previous understanding of multiplication and division to divide fractions by fractions.	
M.NS.6.1.1 Interpret and compute quotients of fractions, and solve world problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.	**Chapter 8 Multiply and Divide Fractions** 8-3 Meaning of Division by a Fraction—pp. 168–169 8-4 Model Dividing Fractions by Fractions—pp. 170–171 8-5 Divide Fractions by Fractions—pp. 172–173 8-6 Estimate Quotients of Fractions and Mixed Numbers—pp. 174–175 8-7 Divide with Whole and Mixed Numbers—pp. 176–177 8-8 Order of Operations with Fractions—pp. 180–181 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

STANDARD 2 – THE NUMBER SYSTEM (NS)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.NS.6.2 Compute fluently with multi-digit numbers and find common factors and multiples.	
M.NS.6.2.1 Fluently divide multi-digit numbers using the standard algorithm.	**Chapter 3 Division Operations and Expressions** 3-1 Divide Whole Numbers—pp. 42–43
M.NS.6.2.2 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	**Chapter 1 Addition and Subtraction Operations and Expressions** 1-1 Estimate Decimal Sums and Differences—pp. 2–3 1-2 Add Decimals—pp. 4–5 1-3 Subtract Decimals—pp. 6–7 **Chapter 2 Multiplication Operations and Expressions** 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 **Chapter 3 Division Operations and Expressions** 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
M.NS.6.2.3 Find the greatest common factor of two whole number less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.	**Chapter 6 Factors and Multiples** 6-1 Prime Factorization—pp. 124–125 6-2 Greatest Common Factor—pp. 126–127 6-3 The Distributive Property and Common Factors—pp. 128–129 6-4 Least Common Multiple—pp. 132–133
M.NS.6.2.4 Use the distributive property to express a sum of two whole numbers 1 – 100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express 36 + 8 as 4 (9 +2).	**Chapter 6 Factors and Multiples** 6-3 The Distributive Property and Common Factors—pp. 128–129

STANDARD 2 – THE NUMBER SYSTEM (NS)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.NS.6.3 Apply and extend previous understandings of numbers to the system of rational numbers.	
M.NS.6.3.1 Understand that positive and negative numbers are used together to describe quantities having opposite directions of values, e.g., temperature above/below zero, elevation above/below sea level.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-2 Integers in the Real World—pp. 198–199
M.NS.6.3.2 Use positive and negative numbers to represent quantities in real world contexts, explaining the meaning of 0 in each situation.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-2 Integers in the Real World—pp. 198–199
M.NS.6.3.3 Understand a rational number as a point on the number line.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-1 Integers on the Number Line—pp. 196–197
M.NS.6.3.4 Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-1 Integers on the Number Line—pp. 196–197
M.NS.6.3.5 Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-1 Integers on the Number Line—pp. 196–197
M.NS.6.3.6 Recognize that the opposite of the opposite of a number is the number itself, e.g., -(-3) = 3, and that 0 is its own opposite.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-1 Integers on the Number Line—pp. 196–197
M.NS.6.3.7 Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-7 Plot Points in the Coordinate Plane—pp. 210–211 9-8 Reflections of Points—pp. 212–213
M.NS.6.3.8 Recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-7 Plot Points in the Coordinate Plane—pp. 210–211 9-8 Reflections of Points—pp. 212–213

STANDARD 2 – THE NUMBER SYSTEM (NS)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.NS.6.3 Apply and extend previous understandings of numbers to the system of rational numbers.	
M.NS.6.3.9 Find and position integers and other rational numbers on a horizontal or vertical number line diagram.	**Chapter 9 Rational Numbers and the Coordinate Plane** 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 9-5 Rational Numbers—pp. 204–205 9-6 Compare and Order Rational Numbers—pp. 206–207 9-11 Problem Solving: Draw a Picture—pp. 218–219
M.NS.6.3.10 Find and position pairs of integers and other rational numbers on a coordinate plane.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-7 Plot Points in the Coordinate Plane—pp. 210–211 9-8 Reflections of Points—pp. 212–213 9-9 Distance on the Coordinate Plane—pp. 214–215 9-10 Plot Polygons—pp. 216–217
M.NS.6.3.11 Understand ordering and absolute value of rational number.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-3 Compare and Order Integers—pp. 200–201 9-6 Compare and Order Rational Numbers—pp. 206–207
M.NS.6.3.12 Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret –3° > –7° as a statement that –3°C is warmer than –7°C on a number line oriented from left to right.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-3 Compare and Order Integers—pp. 200–201 9-6 Compare and Order Rational Numbers—pp. 206–207
M.NS.6.3.13 Write, interpret and explain statements of order for rationale numbers in real-world contexts. For example, write –3°C > –7°C to express the fact that –3°C is warmer than –7°C.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-3 Compare and Order Integers—pp. 200–201 9-6 Compare and Order Rational Numbers—pp. 206–207
M.NS.6.3.14 Understand the absolute value of a rational number as its distance form 0 on the number line.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-3 Compare and Order Integers—pp. 200–201 9-4 Absolute Value as Magnitude—pp. 202–203

STANDARD 2 – THE NUMBER SYSTEM (NS)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.NS.6.3 Apply and extend previous understandings of numbers to the system of rational numbers.	
M.NS.6.3.15 Interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt in dollars.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-3 Compare and Order Integers—pp. 200–201 9-4 Absolute Value as Magnitude—pp. 202–203
M.NS.6.3.16 Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than –30 dollars represents a debt greater than 30 dollars.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-4 Absolute Value as Magnitude—pp. 202–203
M.NS.6.3.17 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-7 Plot Points in the Coordinate Plane—pp. 210–211 9-8 Reflections of Points—pp. 212–213 9-9 Distance on the Coordinate Plane—pp. 214–215 9-10 Plot Polygons—pp. 216–217 9-11 Problem Solving: Draw a Picture—pp. 218–219
M.EE.6.1 Apply and extend previous understandings of arithmetic to algebraic expressions.	
M.EE.6.1.1 Write and evaluate numerical expressions involving whole-number exponents.	**Chapter 4 Numerical and Algebraic Expressions** 4-1 Exponents—pp. 70–71 4-2 Order of Operations—pp. 72–73
M.EE.6.1.2 Write, read, and evaluate expressions in which letters stand for numbers. **M.EE.6.1.3** Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract *y* from 5" as 5 – *y*.	**Chapter 1 Addition and Subtraction Operations and Expressions** 1-4 Write Addition and Subtraction Expressions—pp. 10–11 **Chapter 2 Multiplication Operations and Expressions** 2-4 Write Multiplication Expressions—pp. 30–31 **Chapter 3 Division Operations and Expressions** 3-8 Write Division Expressions—pp. 58–59 **Chapter 4 Numerical and Algebraic Expressions** 4-2 Order of Operations—pp. 72–73 4-3 Parts of Expressions—pp. 74–75

continued

STANDARD 3 – EXPRESSIONS AND EQUATIONS (EE)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6

M.EE.6.1 Apply and extend previous understandings of arithmetic to algebraic expressions.

	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 **Chapter 7 Fractions and Decimals** 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153 **Chapter 8 Multiply and Divide Fractions** 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185
M.EE.6.1.4 Identify parts of an expression using mathematical terms (sums, term, product, factor, quotient, and coefficient); view one or more parts of an expression as a single entity. For example, describe the expression 2(8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.	**Chapter 1 Addition and Subtraction Operations and Expressions** 1-4 Write Addition and Subtraction Expressions—pp. 10–11 **Chapter 2 Multiplication Operations and Expressions** 2-1 Multiply Decimals by 0.1, 0.01, and 0.001—pp. 22–23 2-4 Write Multiplication Expressions—pp. 30–31 **Chapter 3 Division Operations and Expressions** 3-8 Write Division Expressions—pp. 58–59 **Chapter 4 Numerical and Algebraic Expressions** 4-3 Parts of Expressions—pp. 74–75
M.EE.6.1.5 Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems.	**Chapter 1 Addition and Subtraction Operations and Expressions** 1-5 Evaluate Addition and Subtraction Expressions—pp. 12–13 **Chapter 2 Multiplication Operations and Expressions** 2-5 Evaluate Multiplication Expressions—pp. 32–33 **Chapter 3 Division Operations and Expressions** 3-9 Evaluate Division Expressions—pp. 60–61

continued

STANDARD 3 – EXPRESSIONS AND EQUATIONS (EE)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.EE.6.1 Apply and extend previous understandings of arithmetic to algebraic expressions.	
	Chapter 4 Numerical and Algebraic Expressions 4-1 Exponents—pp. 70–71 4-2 Order of Operations—pp. 72–73 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83 4-8 Identify Equivalent Expressions—pp. 86–87 4-9 Use Formulas—pp. 88–89 **Chapter 7 Fractions and Decimals** 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153 **Chapter 8 Multiply and Divide Fractions** 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185
M.EE.6.1.6 Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = ½$.	**Chapter 1 Addition and Subtraction Operations and Expressions** 1-5 Evaluate Addition and Subtraction Expressions—pp. 12–13 **Chapter 2 Multiplication Operations and Expressions** 2-5 Evaluate Multiplication Expressions—pp. 32–33 **Chapter 3 Division Operations and Expressions** 3-9 Evaluate Division Expressions—pp. 60–61 **Chapter 4 Numerical and Algebraic Expressions** 4-1 Exponents—pp. 70–71 4-2 Order of Operations—pp. 72–73 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83 4-8 Identify Equivalent Expressions—pp. 86–87 4-9 Use Formulas—pp. 88–89 **Chapter 7 Fractions and Decimals** 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153 **Chapter 8 Multiply and Divide Fractions** 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185

STANDARD 3 – EXPRESSIONS AND EQUATIONS (EE)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.EE.6.1 Apply and extend previous understandings of arithmetic to algebraic expressions.	
M.EE.6.1.7 Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression 3(2 + *x*) to produce the equivalent expression 6 + 3*x*.	**Chapter 4 Numerical and Algebraic Expressions** 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85
M.EE.6.1.8 Apply the distributive property to the expression 24*x* + 18*y* to produce the equivalent expression 8(4*x* + 3*y*).	**Chapter 4 Numerical and Algebraic Expressions** 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85
M.EE.6.1.9 Apply properties of operations to *y* + *y* + *y* to produce the equivalent expression 3*y*.	**Chapter 4 Numerical and Algebraic Expressions** 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85
M.EE.6.1.10 Identify when two expressions are equivalent, i.e., when the two expressions name the same number regardless of which value is substituted into them. For example, expression *y* + *y* + *y* and 3*y* are equivalent because they name the same number regardless of which number y stands for.	**Chapter 4 Numerical and Algebraic Expressions** 4-8 Identify Equivalent Expressions—pp. 86–87
M.EE.6.2 Reason about and solve one-variable equations and inequalities.	
M.EE.6.2.1 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true?	**Chapter 5 One-Variable Equations and Inequalities** 5-1 Solutions of Equations—pp. 98–99 5-6 Solutions of Inequalities—pp. 110–111
M.EE.6.2.2 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	**Chapter 4 Numerical and Algebraic Expressions** 4-4 Translate Expressions—pp. 76–77 **Chapter 5 One-Variable Equations and Inequalities** 5-2 Addition and Subtraction Equations—pp. 100–101 5-3 Multiplication and Division Equations—pp. 102–103

continued

STANDARD 3 – EXPRESSIONS AND EQUATIONS (EE)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.EE.6.2 Reason about and solve one-variable equations and inequalities.	
	5-4 Write and Solve Equations—pp. 104–105 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
M.EE.6.2.3 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.	**Chapter 5 One-Variable Equations and Inequalities** 5-2 Addition and Subtraction Equations—pp. 100–101 5-3 Multiplication and Division Equations—pp. 102–103 **Chapter 7 Fractions and Decimals** 7-6 Addition and Subtraction Equations with Fractions—pp. 154–155 **Chapter 8 Multiply and Divide Fractions** 8-11 Multiplication and Division Equations with Fractions—pp. 186–187
M.EE.6.2.4 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem.	**Chapter 5 One-Variable Equations and Inequalities** 5-5 Inequalities—pp. 108–109 5-7 Write Inequalities—pp. 112–113
M.EE.6.2.5 Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	**Chapter 5 One-Variable Equations and Inequalities** 5-5 Inequalities—pp. 108–109 5-6 Solutions of Inequalities—pp. 110–111 5-8 Solve Inequalities—pp. 114–115
M.EE.6.3 Represent and analyze quantitative relationships between dependent and independent variables.	
M.EE.6.3.1 Use variables to represent two quantities in a real-world problem that change in relationship to one another.	**Chapter 13 Two-Variable Relationships** 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

STANDARD 3 – EXPRESSIONS AND EQUATIONS (EE)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.EE.6.3 Represent and analyze quantitative relationships between dependent and independent variables.	
M.EE.6.3.2 Write an equation to express one quantity thought of as the dependent variable in terms of the other quantity, thought of as the independent variable.	**Chapter 13 Two-Variable Relationships** 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
M.EE.6.3.3 Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For examples, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = rt$ to represent the relationship between distance and time.	**Chapter 13 Two-Variable Relationships** 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

STANDARD 4 – GEOMETRY (G)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.G.6.1 Solve real-world mathematical problems involving area, surface area, and volume.	
M.G.6.1.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real world and mathematical problem.	**Chapter 14 Geometry: Area** 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 14-5 Areas of Regular Polygons—pp. 326–327 14-6 Areas of Composite Figures—pp. 328–329
M.G.6.1.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism.	**Chapter 15 Geometry: Surface Area and Volume** 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

STANDARD 4 – GEOMETRY (G)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.G.6.1 Solve real-world mathematical problems involving area, surface area, and volume.	
M.G.6.1.3 Apply formulas $V = l \cdot w \cdot h$ and $V = B \cdot h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	**Chapter 15 Geometry: Surface Area and Volume** 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
M.G.6.1.4 Draw polygons in the coordinate plane given coordinates for the vertices.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-10 Plot Polygons—pp. 216–217 9-11 Problem Solving: Draw a Picture—pp. 218–219
M.G.6.1.5 Use coordinates to find the length of a side joining points with the same first coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	**Chapter 9 Rational Numbers and the Coordinate Plane** 9-10 Plot Polygons—pp. 216–217 9-11 Problem Solving: Draw a Picture—pp. 218–219
M.G.6.1.6 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	**Chapter 15 Geometry: Surface Area and Volume** 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

STANDARD 5 – STATISTICS AND PROBABILITY (SP)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.SP.6.1 Develop understanding of statistical variability.	
M.SP.6.1.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical questions because of the variability in students' ages.	**Chapter 16 Measures of Center and Variation** 16-1 Statistical Questions—pp. 358–359

STANDARD 5 – STATISTICS AND PROBABILITY (SP)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.SP.6.1 Develop understanding of statistical variability.	
M.SP.6.1.2 Collect Data: Design and use a plan to collect appropriate data to answer a statistical question.	**Chapter 16 Measures of Center and Variation** 16-1 Statistical Questions—pp. 358–359
M.SP.6.1.3 Analyze Data: Select appropriate graphical methods and numerical measures to analyze data by displaying variability with a group. Compare individual to individual, and compare individual to a group.	**Chapter 16 Measures of Center and Variation** 16-5 Analyze Data—pp. 368–369 **Chapter 17 Data Displays** 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
M.SP.6.1.4 Interpret Results: Draw logical conclusions from the data based on the original question.	**Chapter 17 Data Displays** 17-4 Data Distributions—pp. 386–387 17-5 Interpret Circle Graphs—pp. 388–389
M.SP.6.1.5 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	**Chapter 16 Measures of Center and Variation** 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 **Chapter 17 Data Displays** 17-2 Box Plots—pp. 380–381 17-4 Data Distributions—pp. 386–387
M.SP.6.1.6 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, white a measure of variation describes how its values vary with a single number.	**Chapter 16 Measures of Center and Variation** 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

STANDARD 5 – STATISTICS AND PROBABILITY (SP)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.SP.6.2 Summarize and describe distributions.	
M.SP.6.2.1 Display numerical data in plots on a number line, including dot plots, line plots, histograms, and box plots.	**Chapter 16 Measures of Center and Variation** 16-3 Measures of Variation: Range and Interquartile Range (line plots)—pp. 362–363 16-4 Measure of Variation: Mean Absolute Deviation (line plots)—pp. 366–367 16-5 Analyze Data (line plots)—pp. 368–369 **Chapter 17 Data Displays** 17-1 Dot Plots—pp. 378–379 17-2 Box Plots—pp. 380–381 17-3 Histograms—pp. 382–383 17-5 Problem Solving: Use a Model (dot plot/box plot—pp. 390–391
M.SP.6.2.2 Summarize numerical data sets in relation to their context.	**Chapter 17 Data Displays** 17-4 Data Distributions—pp. 386–387
M.SP.6.2.3 Report the number of observations.	**Chapter 16 Measures of Center and Variation** 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 **Chapter 17 Data Displays** 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
M.SP.6.2.4 Describe the nature of the attribute under investigation, including how it was measured and its units of measurement.	**Chapter 16 Measures of Center and Variation** 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 **Chapter 17 Data Displays** 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

STANDARD 5 – STATISTICS AND PROBABILITY (SP)

Grade 6 Standard & Benchmark Description	*Sadlier Math*, Grade 6
M.SP.6.2 Summarize and describe distributions.	
M.SP.6.2.5 Find the quantitative measures of center (median and/or mean) for a numerical data set and recognize that this value summarizes the data set with a single number. Interpret mean as an equal or fair share. Find measures of variability (range and interquartile range) as well as informally describe the shape and the presence of clusters, gaps, peaks, and outliers in a distribution.	**Chapter 16 Measures of Center and Variation** 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 **Chapter 17 Data Displays** 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
M.SP.6.2.6 Choose the measures of center and variability, based on the shape of the data distribution and the context in which the data was gathered.	**Chapter 16 Measures of Center and Variation** 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 **Chapter 17 Data Displays** 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