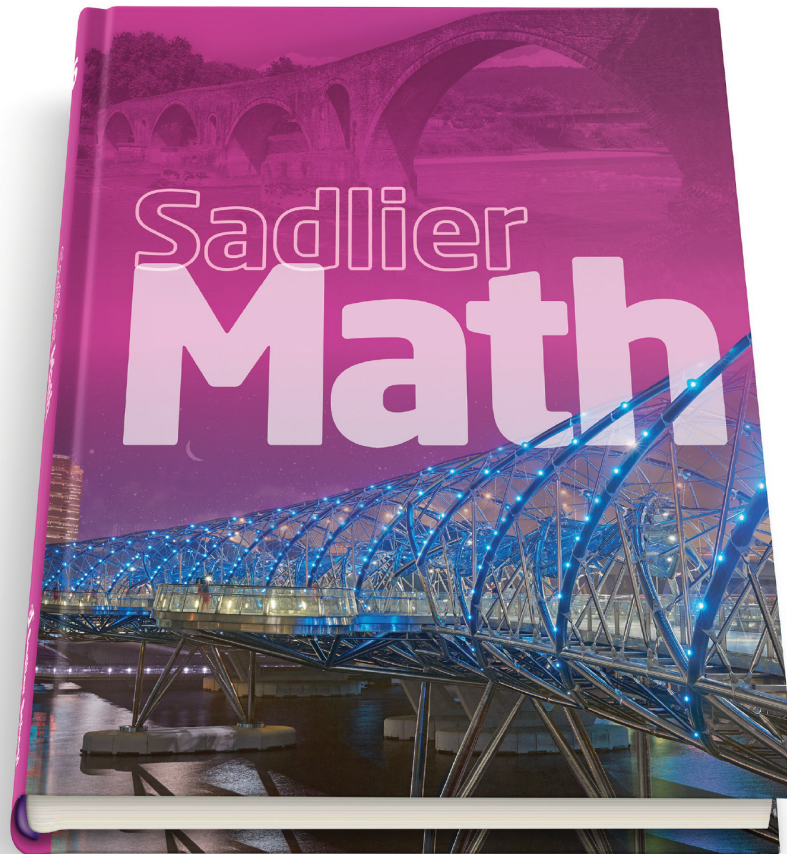


# *Sadlier Math™*

Correlation to the South Dakota State Standards  
for Mathematics

Grade 6



Learn more at [www.SadlierSchool.com/SadlierMath](http://www.SadlierSchool.com/SadlierMath)

**RATIOS AND PROPORTIONAL RELATIONSHIPS**

**6.RP**

**Grade 6 Content Standards**

**Sadlier Math, Grade 6**

**A. Understand ratio concepts and use ratio reasoning to solve problems.**

<p><b>6.RP.1</b> Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For examples, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”</p>	<p><b>Chapter 10 Ratios and Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>• 10-1 Ratios—pp. 226–227</li> </ul>
<p><b>6.RP.2</b> Understand the concept of a unit rate <math>a/b</math> associated with a ratio <math>a:b</math> with <math>b</math> not equal to 0, and use rate language in the context of a ratio relationship. For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is <math>3/4</math> cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”</p>	<p><b>Chapter 10 Ratios and Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>• 10-6 Rates and Unit Rates—pp. 238–239</li> <li>• 10-7 Compare Prices—pp. 240–241</li> <li>• 10-8 Equations for Proportional Relationships—pp. 242–243</li> <li>• 10-9 Graphs of Proportional Relationships—pp. 244–245</li> </ul>
<p><b>6.RP.3</b> Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p>	<p><b>Chapter 10 Ratios and Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>• 10-3 Tape Diagrams—pp. 230–231</li> <li>• 10-4 Double Number Lines—pp. 232–233</li> </ul>
<p>a. 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 plane. Use tables to compare ratios.</p>	<p><b>Chapter 10 Ratios and Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>• 10-2 Tables of Equivalent Ratios—pp. 228–229</li> <li>• 10-5 Compare Ratios—pp. 236–237</li> <li>• 10-7 Compare Prices—pp. 240–241</li> <li>• 10-9 Graphs of Proportional Relationships—pp. 244–245</li> <li>• 10-10 Problem Solving: Make a Table—pp. 246–247</li> </ul>
<p>b. Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</p>	<p><b>Chapter 10 Ratios and Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>• 10-6 Rates and Unit Rates—pp. 238–239</li> <li>• 10-7 Compare Prices—pp. 240–241</li> <li>• 10-8 Equations for Proportional Relationships—pp. 242–243</li> <li>• 10-9 Graphs of Proportional Relationships—pp. 244–245</li> </ul>

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. Sadlier Math™ is a trademark of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).

RATIOS AND PROPORTIONAL RELATIONSHIPS		6.RP
Grade 6 Content Standards	Sadlier Math, Grade 6	
c. 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.	<b>Chapter 11 Percent</b> <ul style="list-style-type: none"> <li>• 11-1 Percent—pp. 254–255</li> <li>• 11-2 Relate Percents to Fractions—pp. 256–257</li> <li>• 11-3 Relate Percents to Decimals—pp. 258–259</li> <li>• 11-4 Relate Decimals, Fractions, and Percents—pp. 260–261</li> <li>• 11-5 Percents Greater Than 100%—pp. 262–263</li> <li>• 11-6 Percents Less Than 1%—pp. 264–265</li> <li>• 11-7 Find the Part—pp. 268–269</li> <li>• 11-8 Find the Percent—pp. 270–271</li> <li>• 11-9 Find the Whole—pp. 272–273</li> <li>• 11-10 Problem Solving: Act it Out—pp. 274–275</li> </ul>	
d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	<b>Chapter 12 Measurement</b> <ul style="list-style-type: none"> <li>• 12-1 Convert Customary Units—pp. 282–283</li> <li>• 12-2 Convert Metric Units—pp. 284–285</li> <li>• 12-3 Convert Between Customary and Metric Units—pp. 288–289</li> <li>• 12-4 Problem Solving: Choose a Strategy—pp. 290–291</li> </ul>	

THE NUMBER SYSTEM		6.NS
Grade 6 Content Standards	Sadlier Math, Grade 6	
<b>A. Apply and extend previous understandings of multiplication and division to divide fractions by fractions.</b>		
<b>6.NS.1</b> Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$ . (In general, $(a/b) \div (c/d) = ad/bc$ .) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?	<b>Chapter 8 Multiply and Divide Fractions</b> <ul style="list-style-type: none"> <li>• 8-3 Meaning of Division by a Fraction—pp. 168–169</li> <li>• 8-4 Model Dividing Fractions by Fractions—pp. 170–171</li> <li>• 8-5 Divide Fractions by Fractions—pp. 172–173</li> <li>• 8-6 Estimate Quotients of Fractions and Mixed Numbers—pp. 174–175</li> <li>• 8-7 Divide with Whole and Mixed Numbers—pp. 176–177</li> <li>• 8-8 Order of Operations with Fractions—pp. 180–181</li> <li>• 8-9 Fractions with Money—pp. 182–183</li> <li>• 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185</li> <li>• 8-11 Multiplication and Division Equations with Fractions—pp. 186–187</li> </ul>	

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. Sadlier Math™ is a trademark of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).

THE NUMBER SYSTEM		6.NS
Grade 6 Content Standards	Sadlier Math, Grade 6	
<b>B. Compute fluently with multi-digit numbers and find common factors and multiples.</b>		
<b>6.NS.2</b> Fluently divide multi-digit numbers using an algorithm including but not limited to the standard algorithm.	<b>Chapter 3 Division Operations and Expressions</b> • 3-1 Divide Whole Numbers—pp. 42–43	
<b>6.NS.3</b> Fluently add, subtract, multiply, and divide multi-digit decimals using an algorithm including but not limited to the standard algorithm for each operation.	<b>Chapter 1 Addition and Subtraction Operations and Expressions</b> • 1-1 Estimate Decimal Sums and Differences—pp. 2–3 • 1-2 Add Decimals—pp. 4–5 • 1-3 Subtract Decimals—pp. 6–7  <b>Chapter 2 Multiplication Operations and Expressions</b> • 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  <b>Chapter 3 Division Operations and Expressions</b> • 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	
<b>6.NS.4</b> Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. 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.	<b>Chapter 6 Factors and Multiples</b> • 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	
<b>C. Apply and extend previous understands of numbers to the system of rational numbers.</b>		
<b>6.NS.5</b> Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and  <i>continued</i>	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> • 9-2 Integers in the Real World—pp. 198–199	

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. Sadlier Math™ is a trademark of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).

THE NUMBER SYSTEM		6.NS
Grade 6 Content Standards	Sadlier Math, Grade 6	
negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.		
<b>6.NS.6</b> Understand a rational number as a point on the number line. 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.		
a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; 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.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> • 9-1 Integers on the Number Line—pp. 196–197	
b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> • 9-7 Plot Points in the Coordinate Plane—pp. 210–211 • 9-8 Reflections of Points—pp. 212–213	
c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> • 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 • 9-7 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	
<b>6.NS.7</b> Understand ordering and absolute value of rational numbers.		
a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> • 9-3 Compare and Order Integers—pp. 200–201 • 9-6 Compare and Order Rational Numbers—pp. 206–207	

THE NUMBER SYSTEM		6.NS
Grade 6 Content Standards	Sadlier Math, Grade 6	
b. Write, interpret, and explain statements of order for rational numbers in real-world contexts.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> <ul style="list-style-type: none"> <li>• 9-3 Compare and Order Integers—pp. 200–201</li> <li>• 9-6 Compare and Order Rational Numbers—pp. 206–207</li> </ul>	
c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> <ul style="list-style-type: none"> <li>• 9-3 Compare and Order Integers—pp. 200–201</li> <li>• 9-4 Absolute Value as Magnitude—pp. 202–203</li> </ul>	
d. Distinguish comparisons of absolute value from statements about order.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> <ul style="list-style-type: none"> <li>• 9-4 Absolute Value as Magnitude—pp. 202–203</li> </ul>	
<b>6.NS.8</b> 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.	<b>Chapter 9 Rational Numbers and the Coordinate Plane</b> <ul style="list-style-type: none"> <li>• 9-7 Plot Points in the Coordinate Plane—pp. 210–211</li> <li>• 9-8 Reflections of Points—pp. 212–213</li> <li>• 9-9 Distance on the Coordinate Plane—pp. 214–215</li> <li>• 9-10 Plot Polygons—pp. 216–217</li> <li>• 9-11 Problem Solving: Draw a Picture—pp. 218–219</li> </ul>	

EXPRESSIONS AND EQUATIONS		6.EE
Grade 6 Content Standards	Sadlier Math, Grade 6	
<b>A. Apply and extend previous understandings of numbers to the system of rational numbers.</b>		
<b>6.EE.1</b> Write and evaluate numerical expressions involving whole-number exponents (e.g. parentheses, brackets, or braces).	<b>Chapter 4 Numerical and Algebraic Expressions</b> <ul style="list-style-type: none"> <li>• 4-1 Exponents—pp. 70–71</li> <li>• 4-2 Order of Operations—pp. 72–73</li> </ul>	
<b>6.EE.2</b> Write, read, and evaluate expressions in which letters stand for numbers.		
a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract $y$ from 5” as $5-y$ .	<b>Chapter 1 Addition and Subtraction Operations and Expressions</b> <ul style="list-style-type: none"> <li>• 1-4 Write Addition and Subtraction Expressions—pp. 10–11</li> </ul> <b>Chapter 2 Multiplication Operations and Expressions</b> <ul style="list-style-type: none"> <li>• 2-4 Write Multiplication Expressions—pp. 30–31</li> </ul> <p style="text-align: right;"><i>continued</i></p>	

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. Sadlier Math™ is a trademark of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).

<b>EXPRESSIONS AND EQUATIONS</b>		<b>6.EE</b>
<b>Grade 6 Content Standards</b>	<b>Sadlier Math, Grade 6</b>	
	<p><b>Chapter 3 Division Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 3-8 Write Division Expressions—pp. 58–59</li> </ul> <p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-2 Order of Operations—pp. 72–73</li> <li>• 4-3 Parts of Expressions—pp. 74–75</li> <li>• 4-4 Translate Expressions—pp. 76–77</li> <li>• 4-5 Translate Expressions Involving Exponents—pp. 78–79</li> <li>• 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83</li> <li>• 4-7 Apply Properties to Write Equivalent Expressions—pp. 84–85</li> <li>• 4-8 Identify Equivalent Expressions—pp. 86–87</li> <li>• 4-9 Use Formulas—pp. 88–89</li> </ul> <p><b>Chapter 7 Fractions and Decimals</b></p> <ul style="list-style-type: none"> <li>• 7-5 Addition and Subtraction Expressions with Fractions—pp. 152–153</li> </ul> <p><b>Chapter 8 Multiply and Divide Fractions</b></p> <ul style="list-style-type: none"> <li>• 8-10 Multiplication and Division Expressions with Fractions—pp. 184–185</li> </ul>	
<p>b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression <math>2(8 + 7)</math> as a product of two factors; view <math>(8 + 7)</math> as both a single entity and a sum of two terms.</p>	<p><b>Chapter 1 Addition and Subtraction Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 1-4 Write Addition and Subtraction Expressions—pp. 10–11</li> </ul> <p><b>Chapter 2 Multiplication Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 2-1 Multiply Decimals by 0.1, 0.01, and 0.001—pp. 22–23</li> <li>• 2-4 Write Multiplication Expressions—pp. 30–31</li> </ul> <p><b>Chapter 3 Division Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 3-8 Write Division Expressions—pp. 58–59</li> </ul> <p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-3 Parts of Expressions—pp. 74–75</li> </ul>	
<p>c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems.</p>	<p><b>Chapter 1 Addition and Subtraction Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 1-5 Evaluate Addition and Subtraction Expressions—pp. 12–13</li> </ul> <p><b>Chapter 2 Multiplication Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 2-5 Evaluate Multiplication Expressions—pp. 32–33</li> </ul> <p><b>Chapter 3 Division Operations and Expressions</b></p> <ul style="list-style-type: none"> <li>• 3-9 Evaluate Division Expressions—pp. 60–61</li> </ul> <p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-1 Exponents—pp. 70–71</li> <li>• 4-2 Order of Operations—pp. 72–73</li> <li>• 4-6 Use the Distributive Property and Evaluate Algebraic Expressions—pp. 82–83</li> </ul> <p style="text-align: right;"><i>continued</i></p>	

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. Sadlier Math™ is a trademark of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).

EXPRESSIONS AND EQUATIONS		6.EE
Grade 6 Content Standards	Sadlier Math, Grade 6	
	<ul style="list-style-type: none"> <li>• 4-8 Identify Equivalent Expressions—pp. 86-87</li> <li>• 4-9 Use Formulas—pp. 88-89</li> </ul> <p><b>Chapter 7 Fractions and Decimals</b></p> <ul style="list-style-type: none"> <li>• 7-5 Addition and Subtraction Expressions with Fractions—pp. 152-153</li> </ul> <p><b>Chapter 8 Multiply and Divide Fractions</b></p> <ul style="list-style-type: none"> <li>• 8-10 Multiplication and Division Expressions with Fractions—pp. 184-185</li> </ul>	
d. Perform arithmetic operations following the order of operations with and without parentheses, including those involving whole-number exponents.	<p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-1 Exponents—pp. 70-71</li> <li>• 4-2 Order of Operations—pp. 72-73</li> </ul>	
<b>6.EE.3</b> Apply the properties of operations to generate equivalent expressions with an emphasis on the distributive property.	<p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-7 Apply Properties to Write Equivalent Expressions—pp. 84-85</li> </ul>	
<b>6.EE.4</b> Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).	<p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-8 Identify Equivalent Expressions—pp. 86-87</li> </ul>	
<b>B. Reason about and solve one-variable equations and inequalities.</b>		
<b>6.EE.5</b> Understand solving an equation or inequality is a process in which you determine values from a set that make an equation or inequality true. Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	<p><b>Chapter 5 One-Variable Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>• 5-1 Solutions of Equations—pp. 98-99</li> <li>• 5-6 Solutions of Inequalities—pp. 110-111</li> </ul>	
<b>6.EE.6</b> 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.	<p><b>Chapter 4 Numerical and Algebraic Expressions</b></p> <ul style="list-style-type: none"> <li>• 4-4 Translate Expressions—pp. 76-77</li> </ul> <p><b>Chapter 5 One-Variable Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>• 5-2 Addition and Subtraction Equations—pp. 100-101</li> <li>• 5-3 Multiplication and Division Equations—pp. 102-103</li> <li>• 5-4 Write and Solve Equations—pp. 104-105</li> <li>• 5-7 Write Inequalities—pp. 112-113</li> <li>• 5-8 Solve Inequalities—pp. 114-115</li> <li>• 5-9 Problem Solving: Write and Solve an Equation—pp. 116-117</li> </ul>	



EXPRESSIONS AND EQUATIONS		6.EE
Grade 6 Content Standards	Sadlier Math, Grade 6	
<p><b>6.EE.7</b> Solve real-world and mathematical problems by writing and solving equations of the form <math>x + p = q</math> and <math>px = q</math> for cases in which <math>p</math>, <math>q</math> and <math>x</math> are all nonnegative rational numbers.</p>	<p><b>Chapter 5 One-Variable Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>• 5-2 Addition and Subtraction Equations—pp. 100-101</li> <li>• 5-3 Multiplication and Division Equations—pp. 102-103</li> </ul> <p><b>Chapter 7 Fractions and Decimals</b></p> <ul style="list-style-type: none"> <li>• 7-6 Addition and Subtraction Equations with Fractions—pp. 154-155</li> </ul> <p><b>Chapter 8 Multiply and Divide Fractions</b></p> <ul style="list-style-type: none"> <li>• 8-11 Multiplication and Division Equations with Fractions—pp. 186-187</li> </ul>	
<p><b>6.EE.8</b> Write an inequality of the form <math>x &gt; c</math>, <math>x &lt; c</math>, <math>x &gt; c</math> or <math>x &lt; c</math> which represents a condition or constraint in a real-world or mathematical problem. Recognize that inequalities have infinitely many solutions; represent solutions of inequalities on number line diagrams.</p>	<p><b>Chapter 5 One-Variable Equations and Inequalities</b></p> <ul style="list-style-type: none"> <li>• 5-5 Inequalities—pp. 108-109</li> <li>• 5-6 Solutions of Inequalities—pp. 110-111</li> <li>• 5-7 Write Inequalities—pp. 112-113</li> <li>• 5-8 Solve Inequalities—pp. 114-115</li> </ul>	
<p><b>C. Represent and analyze quantitative relationships between dependent and independent variables.</b></p>		
<p><b>6.EE.9</b> Use variables to represent two quantities in a real-world problem that change in relationship to one another; 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. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.</p>	<p><b>Chapter 13 Two-Variable Relationships</b></p> <ul style="list-style-type: none"> <li>• 13-1 Related Quantities—pp. 298-299</li> <li>• 13-2 Relationships in Words and Tables—pp. 300-301</li> <li>• 13-3 Relationships in Equations and Graphs—pp. 302-303</li> <li>• 13-4 Multiple Representations of a Relationship—pp. 306-307</li> </ul>	

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).

<b>GEOMETRY</b>		<b>6.G</b>
<b>Grade 6 Content Standards</b>	<b>Sadlier Math, Grade 6</b>	
<b>A. Solve real-world and mathematical problems involved area, surface area, and volume.</b>		
<p><b>6.G.1</b> 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 problems.</p>	<p><b>Chapter 14 Geometry: Area</b></p> <ul style="list-style-type: none"> <li>• 14-1 Areas of Parallelograms and Rhombuses—pp. 316–317</li> <li>• 14-2 Areas of Triangles—pp. 318–319</li> <li>• 14-3 Areas of Trapezoids—pp. 320–321</li> <li>• 14-5 Areas of Regular Polygons—pp. 326–327</li> <li>• 14-6 Areas of Composite Figures—pp. 328–329</li> </ul>	
<p><b>6.G.2</b> 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. Apply the formulas <math>V = lwh</math> and <math>V = Bh</math> where <math>B</math> is the area of the base to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p>	<p><b>Chapter 15 Geometry: Surface Area and Volume</b></p> <ul style="list-style-type: none"> <li>• 15-4 Use Cubes to Find Volumes—pp. 346–347</li> <li>• 15-5 Volumes of Right Rectangular Prisms—pp. 348–349</li> <li>• 15-6 Problem Solving: More Than One Way—pp. 350–351</li> </ul>	
<p><b>6.G.3</b> Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p><b>Chapter 9 Rational Numbers and the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>• 9-10 Plot Polygons—pp. 216–217</li> <li>• 9-11 Problem Solving: Draw a Picture—pp. 218–219</li> </ul>	
<p><b>6.G.4</b> 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.</p>	<p><b>Chapter 15 Geometry: Surface Area and Volume</b></p> <ul style="list-style-type: none"> <li>• 15-1 Nets of Three-Dimensional Figures—pp. 338–339</li> <li>• 15-2 Use Nets to Find Surface Areas of Prisms—pp. 340–341</li> <li>• 15-3 Use Nets to Find Surface Areas of Pyramids—pp. 342–343</li> </ul>	

STATISTICS AND PROBABILITY		6.SP
Grade 6 Content Standards	Sadlier Math, Grade 6	
<b>A. Develop understanding of statistical variability.</b>		
<b>6.SP.1</b> Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.	<b>Chapter 16 Measures of Center and Variation</b> <ul style="list-style-type: none"> <li>16-1 Statistical Questions—pp. 358–359</li> </ul>	
<b>6.SP.2</b> 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.	<b>Chapter 16 Measures of Center and Variation</b> <ul style="list-style-type: none"> <li>16-2 Measures of Center—pp. 360–361</li> <li>16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363</li> <li>16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367</li> <li>16-5 Analyze Data—pp. 368–369</li> </ul> <b>Chapter 17 Data Displays</b> <ul style="list-style-type: none"> <li>17-2 Box Plots—pp. 380–381</li> <li>17-4 Data Distributions—pp. 386–387</li> </ul>	
<b>6.SP.3</b> Recognize that a measure of center (mean and/or median) for a numerical data set summarizes all of its values with a single number, while a measure of variation (such as mean absolute deviation and/or range) summarizes data points' distances from the mean or each other.	<b>Chapter 16 Measures of Center and Variation</b> <ul style="list-style-type: none"> <li>16-2 Measures of Center—pp. 360–361</li> <li>16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363</li> <li>16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367</li> </ul>	
<b>B. Summarize and describe distributions.</b>		
<b>6.SP.4</b> Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	<b>Chapter 17 Data Displays</b> <ul style="list-style-type: none"> <li>17-1 Dot Plots—pp. 378–379</li> <li>17-2 Box Plots—pp. 380–381</li> <li>17-3 Histograms—pp. 382–383</li> </ul>	
<b>6.SP.5</b> Summarize numerical data sets in relation to their context, such as by:		
a. Reporting the number of observations.	<b>Chapter 16 Measures of Center and Variation</b> <ul style="list-style-type: none"> <li>16-2 Measures of Center—pp. 360–361</li> <li>16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363</li> </ul> <p style="text-align: right;"><i>continued</i></p>	

STATISTICS AND PROBABILITY		6.SP
Grade 6 Content Standards	Sadlier Math, Grade 6	
	<ul style="list-style-type: none"> <li>• 16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367</li> <li>• 16-5 Analyze Data—pp. 368–369</li> </ul> <p><b>Chapter 17 Data Displays</b></p> <ul style="list-style-type: none"> <li>• 17-1 Dot Plots—pp. 378–379</li> <li>• 17-2 Box Plots—pp. 380–381</li> <li>• 17-3 Histograms—pp. 382–383</li> <li>• 17-4 Data Distributions—pp. 386–387</li> </ul>	
b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	<p><b>Chapter 16 Measures of Center and Variation</b></p> <ul style="list-style-type: none"> <li>• 16-2 Measures of Center—pp. 360–361</li> <li>• 16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363</li> <li>• 16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367</li> <li>• 16-5 Analyze Data—pp. 368–369</li> </ul> <p><b>Chapter 17 Data Displays</b></p> <ul style="list-style-type: none"> <li>• 17-1 Dot Plots—pp. 378–379</li> <li>• 17-2 Box Plots—pp. 380–381</li> <li>• 17-3 Histograms—pp. 382–383</li> <li>• 17-4 Data Distributions—pp. 386–387</li> </ul>	
c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	<p><b>Chapter 16 Measures of Center and Variation</b></p> <ul style="list-style-type: none"> <li>• 16-2 Measures of Center—pp. 360–361</li> <li>• 16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363</li> <li>• 16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367</li> <li>• 16-5 Analyze Data—pp. 368–369</li> </ul> <p><b>Chapter 17 Data Displays</b></p> <ul style="list-style-type: none"> <li>• 17-1 Dot Plots—pp. 378–379</li> <li>• 17-2 Box Plots—pp. 380–381</li> <li>• 17-3 Histograms—pp. 382–383</li> <li>• 17-4 Data Distributions—pp. 386–387</li> </ul>	
d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	<p><b>Chapter 16 Measures of Center and Variation</b></p> <ul style="list-style-type: none"> <li>• 16-2 Measures of Center—pp. 360–361</li> <li>• 16-3 Measures of Variation: Range and Interquartile Range—pp. 362–363</li> <li>• 16-4 Measure of Variation: Mean Absolute Deviation—pp. 366–367</li> <li>• 16-5 Analyze Data—pp. 368–369</li> </ul> <p><b>Chapter 17 Data Displays</b></p> <ul style="list-style-type: none"> <li>• 17-1 Dot Plots—pp. 378–379</li> <li>• 17-2 Box Plots—pp. 380–381</li> <li>• 17-3 Histograms—pp. 382–383</li> <li>• 17-4 Data Distributions—pp. 386–387</li> </ul>	

Sadlier and Sadlier® are registered trademarks of William H. Sadlier, Inc. Sadlier Math™ is a trademark of William H. Sadlier, Inc. All rights reserved. May be reproduced for educational use (not commercial use).