



SADLIER

Progress in Mathematics

Aligned to the Chapter 111.

Texas Essential Knowledge and Skills for Mathematics

Subchapter B. Middle School, §111.26, Grade 6, Adopted 2012.

Grade 6

(b) Knowledge and skills

(1) Mathematical process standards	2
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(b) Knowledge and skills

GRADE 6 TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS	SADLIER <i>PROGRESS IN MATHEMATICS</i> GRADE 6
(1) Mathematical process standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:	
(A) apply mathematics to problems arising in everyday life, society, and the workplace;	<p>At the beginning of each chapter in the Teacher’s Edition are suggestions for tying mathematics to everyday life, including Literature Connection and Books to Read. Also in the TE is a Problem of the Day, The introduction to many lessons in the textbook focuses on a real-world problem that can be solved by applying the new skill. Many lessons conclude with a set of problem solving exercises—word problems that further connect the new skill or concept to everyday life. The final stage of the lesson plan in the TE—Part 5: Follow-Up, includes applications, such as “Real-World Connections” or “Problem Solving.” At the end of each chapter are two problem solving lessons (Problem Solving Strategy and Problem Solving Applications: Mixed Review).</p>
(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution and evaluating the problem-solving process and the reasonableness of the solution;	<p>Located immediately after the review of key Grade 5 skills at the beginning of the book, Introduction to Problem Solving presents a four-step problem solving model— Read, Plan, Solve, Check. After discussing the model, students examine then review three problem solving strategies. Instruction in each of the 14 chapters concludes with a Problem Solving Strategy lesson and a Problem Solving Applications: Mixed Review with exercises that engage students in applying a variety of strategies they’ve studied. Throughout the program, students are given step-by-step instructions that explain each process. And often they are directed to check the reasonableness of their solutions.</p>
(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;	<p>The lesson plan in the Teacher’s Edition for many lessons offers ideas for using real objects and manipulatives—such as two-color counters, fraction strips, and base-ten blocks—to model the new concept. Depending on the topic, engaging activities involve tools and materials such as scissors, rulers, crayons, tape, or index cards. Located at the back of the TE are several blackline masters that can be used for learning activities. They include a place-value chart, grid and dot paper, number lines, fraction circles, and nets. There is also a wealth of online resources at www.progressinmathematics.com</p>
(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<p>Lessons in the program employ a rich variety of representations, including pictures of concrete models, diagrams, graphs, and symbols, to develop understanding of mathematical concepts and skills. Students reference these representations in their discussions and presentations. They also develop their reasoning ability using the specialized mathematical vocabulary that is highlighted and defined in context (and in the Glossary) in each lesson.</p>

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(E) create and use representations to organize, record, and communicate mathematical ideas;

Lessons such as **Introduction to Problem Solving: Use a Graph**, **5-10 Problem Solving Strategy: Make a Table**, and **9-15 Problem Solving Strategy: Make an Organized List**—as well as the entire Chapter 9 Statistics and Probability—help young people learn to record, organize, and share data.

(F) analyze mathematical relationships to connect and communicate mathematical ideas; and

A part of the chapter opener in the Teacher’s Edition, the Math Connection: Critical Thinking/Finding Together feature provides suggestions for small group discussions of a challenging math problem. Students learn about relationships between concepts as they participate in these and other discussions that lead them discover connections between mathematical ideas. They participate in several logical processes—classify and sort, compare and contrast, make conjectures, distinguish between relevant and irrelevant information, engage in deductive and inductive reasoning, and justify and verify their solutions.

(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

In addition to several opportunities in daily lessons to question and discuss the presentation of new concepts by the teacher, students explain mathematical ideas in written and oral communication in the following activities: Math Journal, Write About It, and Tell About It.

(2) Number and operations. The student applies mathematical process standards to represent and use rational numbers in a variety of forms. The student is expected to:

(A) classify whole numbers, integers, and rational numbers using a visual representation such as a Venn diagram to describe relationships between sets of numbers;

6-16 Rational Numbers—pp. 208–209
Objective(s): To identify rational numbers and their opposites; to show rational numbers on a number line.

(B) identify a number, its opposite, and its absolute value;

5-1 Integers—pp. 150–151
Objective(s): To locate integers and their opposites on a number line; to understand the meaning of the absolute value of an integer; to name an integer to represent a situation.

*5-1A Integers in the Real World—Online
Objective(s): To use positive and negative numbers to represent quantities in the real world and to explain the meaning of 0 in each situation.

5-2 Compare and Order Integers (absolute value)—pp. 152–153
Objective(s): To compare and order integers.

*5-2A Use Reasoning to Compare and Order Rational Numbers—Online
Objective(s): To interpret comparisons of rational numbers and absolute values in real world situations; to distinguish comparisons of absolute value of inequalities from statements about order.

(C) locate, compare, and order integers and rational numbers using a number line;

Skills Update: Add and Subtract Fractions: Like Denominators (number line)—p. 12

1-4 Compare and Order Decimals—p. 40
Objective(s): To compare and order decimals.

5-1 Integers—pp. 150–151
Objective(s): To locate integers and their opposites on a number line; to understand the meaning of the absolute value of an integer; to name an integer to represent a situation.

*5-1A Integers in the Real World—Online
Objective(s): To use positive and negative numbers to represent quantities in the real world and to explain the meaning of 0 in each situation.

- 5-2 Compare and Order Integers (number line)—p. 152
Objective(s): To compare and order integers.
- *5-2A Use Reasoning to Compare and Order Rational Numbers—
Online
Objective(s): To interpret comparisons of rational numbers and
absolute values in real world situations; to distinguish
comparisons of absolute value of inequalities from statements
about order.
- 5-3 Add Integers—p. 154
Objective(s): To add integers using a number line; to add integers
using absolute value.
- 5-4 Subtract Integers (number line)—pp. 156–157
Objective(s): To subtract integers.
- 5-5 Multiply Integers (number line)—p. 158
Objective(s): To multiply integers.
- 6-8 Fraction Sense (number line)—p. 192
Objective(s): To estimate whether a given fraction is close to 0,
 $\frac{1}{2}$, or 1.
- 6-10 Compare Fractions—p. 196
Objective(s): To compare fractions with like denominators and
fractions with unlike denominators.
- 6-11 Order Fractions—pp. 198–199
Objective(s): To order fractions and mixed numbers from least to
greatest and from greatest to least.
- 6-12 Relate Fractions to Decimals (number line)—p. 200
Objective(s): To express fractions and mixed numbers whose
denominators are powers of 10 as decimals; to express decimals
as fractions or mixed numbers with denominators that are
powers of ten.
- 6-14 Rename Decimals as Fractions (number line)—p. 204
Objective(s): To express decimals as fractions or mixed numbers
in simplest form.
- 6-16 Rational Numbers—pp. 208–209
Objective(s): To identify rational numbers and their opposites; to
show rational numbers on a number line.
- 6-17 Compare and Order Rational Numbers—pp. 210–211
Objective(s): To compare rational numbers; to order rational
numbers.
- 7-2 Estimate Sums and Differences (number line)—p. 224
Objective(s): To estimate sums and differences of fractions and
mixed numbers.
- 8-1 Multiply Fractions by Fractions (number line)—p. 250
Objective(s): To multiply fractions by fractions, simplifying using
the GCF when possible.
- 8-2 Multiply Fractions and Whole Numbers (number line)—p.
252
Objective(s): To multiply fractions and whole numbers.
- 8-11 Multiplication and Division Expressions with Fractions
(number line)—p. 270
Objective(s): To evaluate multiplication and division expressions
with fractions.
- 11-12 Decimals, Fractions, and Percents (number line)—pp. 398–
399
Objective(s): To write a decimal percent as a decimal; to write a
fraction that is not a factor of 100 as a percent; to use a number
line to relate and order decimals, fractions, and percents.
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- (D) order a set of rational numbers arising from
mathematical and real-world contexts; and
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- 1-4 Compare and Order Decimals—p. 40
Objective(s): To compare and order decimals.
- 5-2 Compare and Order Integers (number line)—p. 152
Objective(s): To compare and order integers.

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(E) extend representations for division to include fraction notation such as a/b represents the same number as $a \div b$ where $b \neq 0$.

(3) Number and operations. The student applies mathematical process standards to represent addition, subtraction, multiplication, and division while solving problems and justifying solutions. The student is expected to:

(A) recognize that dividing by a rational number and multiplying by its reciprocal result in equivalent values;

(B) determine, with and without computation, whether a quantity is increased or decreased when multiplied by a fraction, including values greater than or less than one;

*5-2A Use Reasoning to Compare and Order Rational Numbers—Online

Objective(s): To interpret comparisons of rational numbers and absolute values in real world situations; to distinguish comparisons of absolute value of inequalities from statements about order.

6-10 Compare Fractions—p. 196

Objective(s): To compare fractions with like denominators and fractions with unlike denominators.

6-11 Order Fractions—pp. 198–199

Objective(s): To order fractions and mixed numbers from least to greatest and from greatest to least.

6-17 Compare and Order Rational Numbers—pp. 210–211

Objective(s): To compare rational numbers; to order rational numbers.

3-10 Multiplication and Division Expressions—pp. 106–107

Objective(s): To write English expressions to match numerical and algebraic expressions involving multiplication and division; to write numerical and algebraic expressions to match English expressions containing multiplication and division concepts.

3-11 Evaluate Multiplication and Division Expressions—pp. 108–109

Objective(s): To find the value of algebraic expressions involving multiplication or division.

8-5 Meaning of Division—pp. 258–259

Objective(s): To understand division with fractions.

11-1 Ratio—pp. 376–377

Objective(s): To write and use ratios; to write ratios in simplest form.

11-2 Equivalent Ratios—pp. 378–379

Objective(s): To write and use equivalent ratios.

*11-2A Ratio and Rate Tables—Online

Objective(s): To use ratio and rate tables to solve mathematical problems; to find equivalent rates; to find missing values in rate tables.

*11-2B Ratios and Unit Rates—Online

Objective(s): To use ratio language to describe a ratio relationship between two quantities; to understand the concept of a unit rate a/b and use rate language in the context of a ratio relationship.

Skills Update: Inverse Operations: Addition and Subtraction (multiplication and division as inverse operations)—p. 7

5-6 Divide Integers—pp. 160–161

Objective(s): To divide integers.

*Related content—

8-1 Multiply Fractions by Fractions—pp. 250–251

Objective(s): To multiply fractions by fractions, simplifying using the GCF when possible.

8-2 Multiply Fractions and Whole Numbers—pp. 252–253

Objective(s): To multiply fractions and whole numbers.

8-4 Multiply Mixed Numbers—pp. 256–257

Objective(s): To multiply mixed numbers.

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(C) represent integer operations with concrete models and connect the actions with the models to standardized algorithms;

5-3 Add Integers (counters)—TE pp. 154–155
Objective(s): To add integers using a number line; to add integers using absolute value.

5-4 Subtract Integers (counters)—TE pp. 156–157
Objective(s): To subtract integers.

5-5 Multiply Integers (integer cards, number lines)—TE pp. 158–159
Objective(s): To multiply integers.

5-6 Divide Integers (counters)—TE pp. 160–161
Objective(s): To divide integers.

5-8 Expressions and Equations with Integers (counters)—TE pp. 164–165
Objective(s): To evaluate expressions involving integers; to solve equations involving integers.

**Readiness—*

5-1 Integers (counters)—TE pp. 150–151
Objective(s): To locate integers and their opposites on a number line; to understand the meaning of the absolute value of an integer; to name an integer to represent a situation.

***5-1A Integers in the Real World**—Online
Objective(s): To use positive and negative numbers to represent quantities in the real world and to explain the meaning of 0 in each situation.

(D) add, subtract, multiply, and divide integers fluently; and

5-3 Add Integers—pp. 154–155
Objective(s): To add integers using a number line; to add integers using absolute value.

5-4 Subtract Integers—pp. 156–157
Objective(s): To subtract integers.

5-5 Multiply Integers—pp. 158–159
Objective(s): To multiply integers.

5-6 Divide Integers—pp. 160–161
Objective(s): To divide integers.

5-11 Problem Solving Applications: Mixed Review—pp. 170–171

14-2 Addition and Subtraction Equations with Integers—pp. 498–499
Objective(s): To write and solve addition and subtraction equations involving integers.

14-3 Multiplication and Division Equations with Integers—pp. 500–501
Objective(s): To write and solve 1- and 2-step equations involving multiplication, division, and integers.

(E) multiply and divide positive rational numbers fluently.

Skills Update: Multiply 1- and 2-Digit Numbers—p. 9

Skills Update: Trial Quotients—p. 10

Skills Update: Divide Whole Numbers—p. 11

Chapter 2 Multiplication: Whole Numbers and Decimals—pp. 65–86

Chapter 3 Division: Whole Numbers and Decimals—pp. 87–120

5-5 Multiply Integers—pp. 158–159
Objective(s): To multiply integers.

5-6 Divide Integers—pp. 160–161
Objective(s): To divide integers.

5-7 Integers and Order of Operations—pp. 162–163
Objective(s): To simplify and evaluate expressions involving integers.

5-8 Expressions and Equations with Integers—pp. 164–165
Objective(s): To evaluate expressions involving integers; to solve equations involving integers.

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<p>(4) Proportionality. The student applies mathematical process standards to develop an understanding of proportional relationships in problem situations. The student is expected to:</p>	
<p>(A) compare two rules verbally, numerically, graphically, and symbolically in the form of $y = ax$ or $y = x + a$ in order to differentiate between additive and multiplicative relationships;</p>	<p>*4-1A Expressions—Online Objective(s): To identify the parts of an expression using the mathematical terms: sum, term, product, factor, quotient, coefficient.</p> <p>4-2 Translate Expressions—pp. 124–125 Objective(s): To translate multistep English expressions to algebraic expressions; to translate multistep algebraic expressions into English expressions.</p> <p>4-3 Evaluate Algebraic Expressions—pp. 126–127 Objective(s): To apply the order of operations to evaluate algebraic expressions when values for variables are given; to combine like terms in algebraic expressions.</p> <p>*4-3A Equivalent Expressions—Online Objective(s): To determine whether two expressions are equivalent by evaluating both expressions at specific values of the variable.</p> <p>4-5 Addition Equations—pp. 130–131 Objective(s): To solve addition equations using the subtraction property of equality.</p> <p>4-7 Multiplication and Division Equations—pp. 134–135 Objective(s): To solve algebraic multiplication equations using the division property of equality; to solve algebraic division equations using the multiplication property of equality when the dividend is unknown; to solve algebraic division equations using a related sentence when the divisor is unknown.</p>
<p>(B) apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates;</p>	<p>11-1 Ratio—pp. 376–377 Objective(s): To write and use ratios; to write ratios in simplest form.</p> <p>11-2 Equivalent Ratios—pp. 378–379 Objective(s): To write and use equivalent ratios.</p> <p>*11-2A Ratio and Rate Tables—Online Objective(s): To use ratio and rate tables to solve mathematical problems; to find equivalent rates; to find missing values in rate tables.</p> <p>*11-2B Ratios and Unit Rates—Online Objective(s): To use ratio language to describe a ratio relationship between two quantities; to understand the concept of a unit rate a/b and use rate language in the context of a ratio relationship.</p> <p>11-3 Rates—pp. 380–381 Objective(s): To write and use ratios; to find unit rate or unit price.</p> <p>*11-3A Compare Ratios—Online Objective(s): To use tables to compare ratios; to compare ratios to solve real-world problems.</p> <p>11-4 Proportions—pp. 382–383 Objective(s): To determine if two ratios form a proportion; to find a missing term to form a proportion.</p>
<p>(C) give examples of ratios as multiplicative comparisons of two quantities describing the same attribute;</p>	<p>11-1 Ratio—pp. 376–377 Objective(s): To write and use ratios; to write ratios in simplest form.</p> <p>11-2 Equivalent Ratios—pp. 378–379 Objective(s): To write and use equivalent ratios.</p>

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(D) give examples of rates as the comparison by division of two quantities having different attributes, including rates as quotients;

*11-2A Ratio and Rate Tables—Online

Objective(s): To use ratio and rate tables to solve mathematical problems; to find equivalent rates; to find missing values in rate tables.

*11-2B Ratios and Unit Rates—Online

Objective(s): To use ratio language to describe a ratio relationship between two quantities; to understand the concept of a unit rate a/b and use rate language in the context of a ratio relationship.

11-3 Rates—pp. 380–381

Objective(s): To write and use ratios; to find unit rate or unit price.

11-4 Proportions—p. 383

Objective(s): To determine if two ratios form a proportion; to find a missing term to form a proportion.

11-6 Write Proportions—pp. 386–387

Objective(s): To write proportions; to use proportions to solve problems.

12-4 Find the Rate—pp. 420–421

Objective(s): To find what percent, or rate, one number is of another.

(E) represent ratios and percents with concrete models, fractions, and decimals;

12-1 Mental Math: Percent—pp. 414–415

Objective(s): To find a percent of a number by mental computation.

12-2 Percent Sense—pp. 416–417

Objective(s): To mentally compare percents of a number; to estimate what percent one number is of another.

12-3 Percentage of a Number—pp. 418–419

Objective(s): To find a percent of a number.

(F) represent benchmark fractions and percents such as 1%, 10%, 25%, $33\frac{1}{3}\%$, and multiples of these values using 10 by 10 grids, strip diagrams, number lines, and numbers;

6-4 Equivalent Fractions—pp. 184–185

Objective(s): To find equivalent fractions.

6-7 Mixed Numbers and Improper Fractions—p. 191

Objective(s): To read and write mixed numbers; to rename a mixed number as an improper fraction, and vice versa.

6-8 Fraction Sense—p. 192

Objective(s): To estimate whether a given fraction is close to 0, $\frac{1}{2}$, or 1.

6-10 Compare Fractions—pp. 196–197

Objective(s): To compare fractions with like denominators and fractions with unlike denominators.

6-11 Order Fractions—pp. 198–199

Objective(s): To order fractions and mixed numbers from least to greatest and from greatest to least.

7-1 Addition Properties: Fractions—pp. 222–223

Objective(s): To apply addition properties to computations with fractions.

8-1 Multiply Fractions by Fractions (number line)—p. 250

Objective(s): To multiply fractions by fractions, simplifying using the GCF when possible

8-2 Multiply Fractions and Whole Numbers—p. 252

Objective(s): To multiply fractions and whole numbers.

8-5 Meaning of Division—pp. 258–259

Objective(s): To understand division with fractions.

8-6 Divide Fractions by Fractions—p. 260

Objective(s): To divide a fraction by a fraction.

11-10 Relate Percents to Fractions—pp. 394–395

Objective(s): To write a percent as a ratio, and vice versa; to write a percent as a fraction, and vice versa; to use a number line to relate percents to fractions.

12-1 Mental Math: Percent—pp. 414–415

Objective(s): To find a percent of a number by mental computation.

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(G) generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money; and

(H) convert units within a measurement system, including the use of proportions and unit rates.

12-2 Percent Sense—pp. 416–417
 Objective(s): To mentally compare percents of a number; to estimate what percent one number is of another.

12-3 Percentage of a Number—pp. 418–419
 Objective(s): To find a percent of a number.

6-4 Equivalent Fractions—pp. 184–185
 Objective(s): To find equivalent fractions.

6-12 Relate Fractions to Decimals—pp. 200–201
 Objective(s): To express fractions and mixed numbers whose denominators are powers of 10 as decimals; to express decimals as fractions or mixed numbers with denominators that are powers of ten.

6-13 Rename Fractions as Decimals—pp. 202–203
 Objective(s): To express fractions and mixed numbers as decimals.

6-14 Rename Decimals as Fractions—pp. 204–205
 Objective(s): To express decimals as fractions or mixed numbers in simplest form.

6-15 Terminating and Repeating Decimals—pp. 206–207
 Objective(s): To express fractions and mixed numbers as terminating or repeating decimals.

11-2 Equivalent Ratios—pp. 378–379
 Objective(s): To write and use equivalent ratios.

11-10 Relate Percents to Fractions—pp. 394–395
 Objective(s): To write a percent as a ratio, and vice versa; to write a percent as a fraction, and vice versa; to use a number line to relate percents to fractions.

11-11 Relate Percents to Decimals—pp. 396–397
 Objective(s): To write a percent as a decimal, and vice versa.

11-12 Decimals, Fractions, and Percents—pp. 398–399
 Objective(s): To write a decimal percent as a decimal; to write a fraction that is not a factor of 100 as a percent; to use a number line to relate and order decimals, fractions, and percents

Skills Update: Metric Units of Capacity and Mass—p. 21

Skills Update: Customary Units of Length—p. 22

Skills Update: Customary Units of Capacity and Weight—p. 23

*11-2B Ratios and Unit Rates—Online
 Objective(s): To use ratio language to describe a ratio relationship between two quantities; to understand the concept of a unit rate a/b and use rate language in the context of a ratio relationship.

13-1 Measure Metric Length—pp. 448–449
 Objective(s): To measure length to the nearest centimeter and millimeter; to rename metric units of length among millimeters through kilometers.

13-2 Measure Metric Capacity and Mass—pp. 450–451
 Objective(s): To rename and compare metric units of capacity and mass.

13-3 Measure Customary Length—pp. 452–453
 Objective(s): To measure lengths to the nearest in., $1/2$ in., $1/4$ in., $1/8$ in., and $1/16$ in.; to rename and compare customary units of length.

13-4 Measure Customary Capacity and Weight—pp. 454–455
 Objective(s): To rename and compare customary units of capacity and weight.

13-5 Compute Customary Units—pp. 456–457
 Objective(s): To compute with customary units of length, capacity, and weight.

*13-7A Use Proportions to Convert Units—Online
 Objective(s): To use a proportion to convert a measurement from one unit to another.

Table of Measures: Time, Metric Units, Customary Units—p. 564

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(5) Proportionality. The student applies mathematical process standards to solve problems involving proportional relationships. The student is expected to:	
(A) represent mathematical and real-world problems involving ratios and rates using scale factors, tables, graphs, and proportions;	<p>11-1 Ratio—pp. 376–377 Objective(s): To write and use ratios; to write ratios in simplest form.</p> <p>11-2 Equivalent Ratios—pp. 378–379 Objective(s): To write and use equivalent ratios.</p> <p>*11-2A Ratio and Rate Tables—Online Objective(s): To use ratio and rate tables to solve mathematical problems; to find equivalent rates; to find missing values in rate tables.</p> <p>*11-2B Ratios and Unit Rates—Online Objective(s): To use ratio language to describe a ratio relationship between two quantities; to understand the concept of a unit rate a/b and use rate language in the context of a ratio relationship.</p> <p>11-3 Rates—pp. 380–381 Objective(s): To write and use ratios; to find unit rate or unit price.</p> <p>*11-3A Compare Ratios—Online Objective(s): To use tables to compare ratios; to compare ratios to solve real-world problems.</p> <p>11-4 Proportions—pp. 382–383 Objective(s): To determine if two ratios form a proportion; to find a missing term to form a proportion.</p> <p>*11-4A Model Proportions with Double Number Lines—Online Objective(s): To model proportions; to use a double-number line to find equal ratios.</p> <p>*11-4B Model Proportions with Tape Diagrams—Online Objective(s): To model proportions; to use a tape diagram to find equal ratios.</p> <p>11-5 Solve Proportions—pp. 384–385 Objective(s): To find a missing term in a proportion.</p> <p>11-6 Write Proportions—pp. 386–387 Objective(s): To write proportions; to use proportions to solve problems.</p> <p>11-7 Proportions and Similar Figures—pp. 388–389 Objective(s): To write proportions involving corresponding sides of similar figures; to use proportions to find missing side lengths of similar geometric figures.</p> <p>11-8 Use Proportions—pp. 390–391 Objective(s): To use proportions to solve indirect measurement problems.</p> <p>11-9 Scale Drawings and Maps—pp. 392–393 Objective(s): To use proportions to solve problems involving scale drawings and maps.</p> <p>12-6 Percent Problems (proportions)—pp. 424–425 Objective(s): To solve problems by finding a percent of a number or by finding what percent one number is of another.</p> <p>12-7 Discount and Sale Price (proportions)—p. 427 Objective(s): To find the amount of a discount and the sale price.</p> <p>12-8 Sales Tax and Total Cost (proportions)—p. 429 Objective(s): To find sales tax and total cost.</p>
(B) solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models; and	<p>12-1 Mental Math: Percent—pp. 414–415 Objective(s): To find a percent of a number by mental computation.</p> <p>12-2 Percent Sense—pp. 416–417 Objective(s): To mentally compare percents of a number; to estimate what percent one number is of another.</p>

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- (C) use equivalent fractions, decimals, and percents to show equal parts of the same whole.

- 12-3 Percentage of a Number—pp. 418–419
 Objective(s): To find a percent of a number.
- 12-4 Find the Rate—pp. 420–421
 Objective(s): To find what percent, or rate, one number is of another.
- 12-5 Find the Original Number—pp. 422–423
 Objective(s): To find the original number when a percent of it is known.
- 12-6 Percent Problems—pp. 424–425
 Objective(s): To solve problems by finding a percent of a number or by finding what percent one number is of another.
- 12-7 Discount and Sale Price—pp. 426–427
 Objective(s): To find the amount of a discount and the sale price.
- 12-8 Sales Tax and Total Cost—pp. 428–429
 Objective(s): To find sales tax and total cost.
- 12-9 Better Buy—pp. 430–431
 Objective(s): To determine better buy.
- 12-10 Commission—pp. 432–433
 Objective(s): To find commission.
- 12-11 Simple Interest—pp. 434–435
 Objective(s): To examine simple interest concepts; to use the simple interest formula to find the interest; to apply the simple interest formula to find the total amount.
- 12-13 Problem Solving Strategy: Write an Equation—pp. 438–439
 Objective(s): To solve problems by writing and solving an equation.
- 12-14 Problem Solving Applications: Mixed Review—pp. 440–441
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- 6-4 Equivalent Fractions—pp. 184–185
 Objective(s): To find equivalent fractions.
- 6-12 Relate Fractions to Decimals—pp. 200–201
 Objective(s): To express fractions and mixed numbers whose denominators are powers of 10 as decimals; to express decimals as fractions or mixed numbers with denominators that are powers of ten.
- 6-13 Rename Fractions as Decimals—pp. 202–203
 Objective(s): To express fractions and mixed numbers as decimals.
- 6-14 Rename Decimals as Fractions—pp. 204–205
 Objective(s): To express decimals as fractions or mixed numbers in simplest form.
- 6-15 Terminating and Repeating Decimals—pp. 206–207
 Objective(s): To express fractions and mixed numbers as terminating or repeating decimals.
- 11-2 Equivalent Ratios—pp. 378–379
 Objective(s): To write and use equivalent ratios.
- 11-10 Relate Percents to Fractions—pp. 394–395
 Objective(s): To write a percent as a ratio, and vice versa; to write a percent as a fraction, and vice versa; to use a number line to relate percents to fractions.
- 11-11 Relate Percents to Decimals—pp. 396–397
 Objective(s): To write a percent as a decimal, and vice versa.
- 11-12 Decimals, Fractions, and Percents—pp. 398–399
 Objective(s): To write a decimal percent as a decimal; to write a fraction that is not a factor of 100 as a percent; to use a number line to relate and order decimals, fractions, and percents

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<p>(6) Expressions, equations, and relationships. The student applies mathematical process standards to use multiple representations to describe algebraic relationships. The student is expected to:</p> <p>(A) identify independent and dependent quantities from tables and graphs;</p> <hr/> <p>(B) write an equation that represents the relationship between independent and dependent quantities from a table; and</p> <hr/> <p>(C) represent a given situation using verbal descriptions, tables, graphs, and equations in the form $y = kx$ or $y = x + b$.</p>	<p>14-4 Functions and Ordered Pairs—pp. 502–503 Objective(s): To write ordered pairs of numbers for a given function rule; to complete function tables.</p> <p>*14-4A Independent and Dependent Variables—Online Objective(s): To distinguish between independent and dependent variables; to write an equation from a list of values that describes the relationship between two variables.</p> <p>14-8 Graph Functions—pp. 510–511 Objective(s): To complete a function table to find (x, y) coordinates; to write an equation for a linear function; to graph linear functions on a coordinate plane.</p> <p>*14-8A Related Variables—Online Objective(s): To analyze the relationship between the independent and dependent variable using tables; to graph the relationship between two variables; to relate tables and graphs to equations.</p> <hr/> <p>14-4 Functions and Ordered Pairs—pp. 502–503 Objective(s): To write ordered pairs of numbers for a given function rule; to complete function tables.</p> <p>*14-4A Independent and Dependent Variables—Online Objective(s): To distinguish between independent and dependent variables; to write an equation from a list of values that describes the relationship between two variables.</p> <p>*14-8A Related Variables—Online Objective(s): To analyze the relationship between the independent and dependent variable using tables; to graph the relationship between two variables; to relate tables and graphs to equations.</p> <hr/> <p>14-8 Graph Functions—pp. 510–511 Objective(s): To complete a function table to find (x, y) coordinates; to write an equation for a linear function; to graph linear functions on a coordinate plane.</p> <p>*14-8A Related Variables—Online Objective(s): To analyze the relationship between the independent and dependent variable using tables; to graph the relationship between two variables; to relate tables and graphs to equations.</p>
<p>(7) Expressions, equations, and relationships. The student applies mathematical process standards to develop concepts of expressions and equations. The student is expected to:</p> <p>(A) generate equivalent numerical expressions using order of operations, including whole number exponents and prime factorization;</p>	<p>4-1 Order of Operations—pp. 122–123 Objective(s): To use order of operations to compute with whole numbers.</p> <p>*4-1A Expressions—Online Objective(s): To identify the parts of an expression using the mathematical terms: sum, term, product, factor, quotient, coefficient.</p> <p>4-2 Translate Expressions—pp. 124–125 Objective(s): To translate multistep English expressions to algebraic expressions; to translate multistep algebraic expressions into English expressions.</p> <p>*4-2A Expressions Involving Exponents—Online Objective(s): To write and evaluate numerical expressions involving exponents.</p>

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(B) distinguish between expressions and equations verbally, numerically, and algebraically;

(C) determine if two expressions are equivalent using concrete models, pictorial models, and algebraic representations; and

(D) generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties.

(8) Expressions, equations, and relationships. The student applies mathematical process standards to use geometry to represent relationships and solve problems. The student is expected to:

(A) extend previous knowledge of triangles and their properties to include the sum of angles of a triangle, the relationship between the lengths of sides and measures of angles in a triangle, and determining when three lengths form a triangle;

4-3 Evaluate Algebraic Expressions—pp. 126–127

Objective(s): To apply the order of operations to evaluate algebraic expressions when values for variables are given; to combine like terms in algebraic expressions.

*4-3A Equivalent Expressions—Online

Objective(s): To determine whether two expressions are equivalent by evaluating both expressions at specific values of the variable.

6-3 Prime Factorization—pp. 182–183

Objective(s): To find the prime factorization of a composite number.

4-4 Equations and Inequalities—pp. 128–129

Objective(s): To translate English statements into equations and inequalities; to determine whether an equation or an inequality is true or false, and true or false; to determine whether a given value is a solution to an equation or inequality.

*4-4A Inequalities—Online

Objective(s): To translate word sentences into inequalities; to determine whether a given value is a solution of an inequality; to graph the solution to an inequality on the number line.

*4-3A Equivalent Expressions—Online

Objective(s): To determine whether two expressions are equivalent by evaluating both expressions at specific values of the variable.

4-1 Order of Operations—pp. 122–123

Objective(s): To use order of operations to compute with whole numbers.

*4-1A Expressions—Online

Objective(s): To identify the parts of an expression using the mathematical terms: sum, term, product, factor, quotient, coefficient.

4-2 Translate Expressions—pp. 124–125

Objective(s): To translate multistep English expressions to algebraic expressions; to translate multistep algebraic expressions into English expressions.

*4-2A Expressions Involving Exponents—Online

Objective(s): To write and evaluate numerical expressions involving exponents.

4-3 Evaluate Algebraic Expressions—pp. 126–127

Objective(s): To apply the order of operations to evaluate algebraic expressions when values for variables are given; to combine like terms in algebraic expressions.

*4-3A Equivalent Expressions—Online

Objective(s): To determine whether two expressions are equivalent by evaluating both expressions at specific values of the variable.

10-7 Polygons—pp. 342–343

Objective(s): To classify polygons as regular or not regular; to use diagonals to determine whether a polygon is convex or concave.

10-8 Triangles—pp. 344–345

Objective(s): To classify triangles; to construct congruent triangles.

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(B) model area formulas for parallelograms, trapezoids, and triangles by decomposing and rearranging parts of these shapes;

(C) write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers; and

(D) determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers.

10-10 Angles of Triangles and Quadrilaterals—pp. 348–349
 Objective(s): To learn about the sums of the measures of the interior angles of triangles and quadrilaterals; to find the measure of the third angle in a triangle when two angle measures are known and the measure of the fourth angle in a quadrilateral when three angle measures are known.

13-10 Area of Triangles and Parallelograms—pp. 466–467
 Objective(s): To use formulas to find the area of parallelograms and triangles.

13-11 Area of Trapezoids—pp. 468–469
 Objective(s): To use a formula to find the area of a trapezoid.

*13-11A Plane Figures and Area—Online
 Objective(s): To find the area of a figure by decomposing into known shapes; to solve real-world problems involving the composition and decomposition of area.

13-9 Area of Rectangles and Squares—pp. 464–465
 Objective(s): To use formulas to find the areas of rectangles, squares, and complex figures.

13-10 Area of Triangles and Parallelograms—pp. 466–467
 Objective(s): To use formulas to find the area of parallelograms and triangles.

13-11 Area of Trapezoids—pp. 468–469
 Objective(s): To use a formula to find the area of a trapezoid.

*13-11A Plane Figures and Area—Online
 Objective(s): To find the area of a figure by decomposing into known shapes; to solve real-world problems involving the composition and decomposition of area.

13-14 Surface Area of Cubes, Rectangular Prisms, and Cylinders—pp. 474–475
 Objective(s): To use formulas to find the surface area of cubes, rectangular prisms, and cylinders.

13-16 Volume of Prisms—pp. 478–479
 Objective(s): To use formulas to find the volume of cubes and rectangular prisms.

*13-16A Use Partial Cubes to Find Volume—Online
 Objective(s): To use a model to find the volume of a rectangular prism with a fractional dimension by counting unit cubes with fractional sides.

*13-16B Volume of a Prism—Online
 Objective(s): To find the volume of a rectangular prism with a fractional dimension by using an equation and comparing to the volume found by counting unit cubes with fractional sides.

13-18 Volume of Pyramids—p. 482
 Objective(s): To use a formula to find the volume of a pyramid.

13-19 Use Formulas to Solve Problems—pp. 484–485
 Objective(s): To use perimeter and area formulas to solve problems involving irregular or compound figures.

13-20 Problem Solving Strategy: Use Drawings / Formulas—p. 487
 Objective(s): To solve problems using drawings and formulas.

13-21 Problem Solving Applications: Mixed Review—pp. 488–489

13-9 Area of Rectangles and Squares—pp. 464–465
 Objective(s): To use formulas to find the areas of rectangles, squares, and complex figures.

13-10 Area of Triangles and Parallelograms—pp. 466–467
 Objective(s): To use formulas to find the area of parallelograms and triangles.

13-11 Area of Trapezoids—pp. 468–469
 Objective(s): To use a formula to find the area of a trapezoid

(9) Expressions, equations, and relationships. The student applies mathematical process standards to use equations and inequalities to represent situations. The student is expected to:

- (A) write one-variable, one-step equations and inequalities to represent constraints or conditions within problems;

- *13-11A Plane Figures and Area—Online
 Objective(s): To find the area of a figure by decomposing into known shapes; to solve real-world problems involving the composition and decomposition of area.
- 13-14 Surface Area of Cubes, Rectangular Prisms, and Cylinders—pp. 474–475
 Objective(s): To use formulas to find the surface area of cubes, rectangular prisms, and cylinders.
- 13-16 Volume of Prisms—pp. 478–479
 Objective(s): To use formulas to find the volume of cubes and rectangular prisms.
- *13-16A Use Partial Cubes to Find Volume—Online
 Objective(s): To use a model to find the volume of a rectangular prism with a fractional dimension by counting unit cubes with fractional sides.
- *13-16B Volume of a Prism—Online
 Objective(s): To find the volume of a rectangular prism with a fractional dimension by using an equation and comparing to the volume found by counting unit cubes with fractional sides.
- 13-18 Volume of Pyramids—p. 482
 Objective(s): To use a formula to find the volume of a pyramid.
- 13-19 Use Formulas to Solve Problems—pp. 484–485
 Objective(s): To use perimeter and area formulas to solve problems involving irregular or compound figures.
- 13-20 Problem Solving Strategy: Use Drawings / Formulas—p. 487
 Objective(s): To solve problems using drawings and formulas.
- 13-21 Problem Solving Applications: Mixed Review—pp. 488–489

- 4-4 Equations and Inequalities—pp. 128–129
 Objective(s): To translate English statements into equations and inequalities; to determine whether an equation or an inequality is true or false, and true or false; to determine whether a given value is a solution to an equation or inequality.
- 4-5 Addition Equations—pp. 130–131
 Objective(s): To solve addition equations using the subtraction property of equality.
- 4-6 Subtraction Equations—pp. 132–133
 Objective(s): To solve algebraic subtraction equations using the addition property of equality; to solve algebraic subtraction equations using a related sentence when the subtrahend is unknown.
- 4-7 Multiplication and Division Equations—pp. 134–135
 Objective(s): To solve algebraic multiplication equations using the division property of equality; to solve algebraic division equations using the multiplication property of equality when the dividend is unknown; to solve algebraic division equations using a related sentence when the divisor is unknown.
- *4-7A Write an Equation—Online
 Objective(s): To write an equation equivalent to an equation with an unknown operand; to find the missing factor in an equation.
- 4-8 Use Formulas—pp. 136–137
 Objective(s): To use formulas to solve problems.

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(B) represent solutions for one-variable, one-step equations and inequalities on number lines; and

4-4 Equations and Inequalities—pp. 128–129
Objective(s): To translate English statements into equations and inequalities; to determine whether an equation or an inequality is true or false, and true or false; to determine whether a given value is a solution to an equation or inequality.

4-5 Addition Equations—pp. 130–131
Objective(s): To solve addition equations using the subtraction property of equality.

4-6 Subtraction Equations—pp. 132–133
Objective(s): To solve algebraic subtraction equations using the addition property of equality; to solve algebraic subtraction equations using a related sentence when the subtrahend is unknown.

4-7 Multiplication and Division Equations—pp. 134–135
Objective(s): To solve algebraic multiplication equations using the division property of equality; to solve algebraic division equations using the multiplication property of equality when the dividend is unknown; to solve algebraic division equations using a related sentence when the divisor is unknown.

*4-7A Write an Equation—Online
Objective(s): To write an equation equivalent to an equation with an unknown operand; to find the missing factor in an equation.

(C) write corresponding real-world problems given one-variable, one-step equations or inequalities.

4-4 Equations and Inequalities—pp. 128–129
Objective(s): To translate English statements into equations and inequalities; to determine whether an equation or an inequality is true or false, and true or false; to determine whether a given value is a solution to an equation or inequality.

4-5 Addition Equations—pp. 130–131
Objective(s): To solve addition equations using the subtraction property of equality.

4-6 Subtraction Equations—pp. 132–133
Objective(s): To solve algebraic subtraction equations using the addition property of equality; to solve algebraic subtraction equations using a related sentence when the subtrahend is unknown.

4-7 Multiplication and Division Equations—pp. 134–135
Objective(s): To solve algebraic multiplication equations using the division property of equality; to solve algebraic division equations using the multiplication property of equality when the dividend is unknown; to solve algebraic division equations using a related sentence when the divisor is unknown.

*4-7A Write an Equation—Online
Objective(s): To write an equation equivalent to an equation with an unknown operand; to find the missing factor in an equation.

4-8 Use Formulas—pp. 136–137
Objective(s): To use formulas to solve problems.

(10) Expressions, equations, and relationships. The student applies mathematical process standards to use equations and inequalities to solve problems. The student is expected to:

(A) model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts; and

4-4 Equations and Inequalities—pp. 128–129
Objective(s): To translate English statements into equations and inequalities; to determine whether an equation or an inequality is true or false, and true or false; to determine whether a given value is a solution to an equation or inequality.

4-5 Addition Equations—pp. 130–131
Objective(s): To solve addition equations using the subtraction property of equality.

(B) determine if the given value(s) make(s) one-variable, one-step equations or inequalities true.

(11) Measurement and data. The student applies mathematical process standards to use coordinate geometry to identify locations on a plane. The student is expected to graph points in all four quadrants using ordered pairs of rational numbers.

4-6 Subtraction Equations—pp. 132–133

Objective(s): To solve algebraic subtraction equations using the addition property of equality; to solve algebraic subtraction equations using a related sentence when the subtrahend is unknown.

4-7 Multiplication and Division Equations—pp. 134–135

Objective(s): To solve algebraic multiplication equations using the division property of equality; to solve algebraic division equations using the multiplication property of equality when the dividend is unknown; to solve algebraic division equations using a related sentence when the divisor is unknown.

*4-7A Write an Equation—Online

Objective(s): To write an equation equivalent to an equation with an unknown operand; to find the missing factor in an equation.

4-8 Use Formulas (geometric formulas)—pp. 136–137

Objective(s): To use formulas to solve problems.

4-4 Equations and Inequalities—pp. 128–129

Objective(s): To translate English statements into equations and inequalities; to determine whether an equation or an inequality is true or false, and true or false; to determine whether a given value is a solution to an equation or inequality.

4-5 Addition Equations—pp. 130–131

Objective(s): To solve addition equations using the subtraction property of equality.

4-6 Subtraction Equations—pp. 132–133

Objective(s): To solve algebraic subtraction equations using the addition property of equality; to solve algebraic subtraction equations using a related sentence when the subtrahend is unknown.

4-7 Multiplication and Division Equations—pp. 134–135

Objective(s): To solve algebraic multiplication equations using the division property of equality; to solve algebraic division equations using the multiplication property of equality when the dividend is unknown; to solve algebraic division equations using a related sentence when the divisor is unknown.

*4-7A Write an Equation—Online

Objective(s): To write an equation equivalent to an equation with an unknown operand; to find the missing factor in an equation.

4-8 Use Formulas—pp. 136–137

Objective(s): To use formulas to solve problems.

14-5 Graph Ordered Pairs—pp. 504–505

Objective(s): To name ordered pairs for points on a coordinate plane, and vice versa; to graph points in all four quadrants.

*14-5A Distances and the Coordinate Plane—Online

Objective(s): To find distances between points with the same first coordinate or the same second coordinate in a coordinate plane; to solve real-world problems by graphing points in all four quadrants of a coordinate plane.

*14-5B Graphing Polygons—Online

Objective(s): To calculate vertical and horizontal distances on a coordinate plane; to graph parallelograms, triangles, and trapezoids on the coordinate plane by using the coordinates of their vertices.

14-6 Graph Reflections and Translations—pp. 506–507

Objective(s): To graph reflections and translations of geometric figures on a coordinate plane.

14-7 Graph Rotations—pp. 508–509

Objective(s): To graph rotations on a coordinate plane.

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(12) Measurement and data. The student applies mathematical process standards to use numerical or graphical representations to analyze problems. The student is expected to:

(A) represent numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots;

(B) use the graphical representation of numeric data to describe the center, spread, and shape of the data distribution;

14-8 Graph Functions—pp. 510–511

Objective(s): To complete a function table to find (x, y) coordinates; to write an equation for a linear function; to graph linear functions on a coordinate plane.

14-11 Problem Solving Applications: Mixed Review—p. 517

Skills Update: Make Pictographs—p. 13

Skills Update: Make Bar Graphs—p. 14

Introduction to Problem Solving: Strategy: Use a Graph—p. 30

9-1 Surveys—pp. 292–293

Objective(s): To understand what a sample is and how to select one; to use samples to make predictions.

9-6 Analyze Data—pp. 302–303

Objective(s): To identify clusters, gaps, and outliers for a set of data; to interpret and make line plots.

*9-6A Statistical Characteristics of a Data Set—Online

Objective(s): To understand that a set of data has a distribution that can be described by its center, spread, and overall shape using dot plots; to identify whether a question is a statistical question; to find and use the mean, median, and mode of a set of data.

9-7 Box-and-Whisker Plots—pp. 304–305

Objective(s): To interpret box-and-whisker plots; to make box-and-whisker plots to show the distribution of data.

9-8 Stem-and-Leaf Plots—pp. 306–307

Objective(s): To make and interpret a stem-and-leaf plot.

9-9 Line Graphs—pp. 308–309

Objective(s): To make line graphs; to analyze line graphs.

9-10 Double Line Graphs—pp. 310–311

Objective(s): To make double line graphs; to interpret double line graphs.

9-11 Double Bar Graphs—pp. 312–313

Objective(s): To make double bar graphs; to interpret double bar graphs.

9-12 Misleading Graphs and Statistics—pp. 314–315

Objective(s): To analyze graphs and statistics to determine if they are misleading.

9-13 Histograms—pp. 316–317

Objective(s): To make/use a frequency table in preparation for constructing a histogram; to make and use a histogram.

9-14 Interpret Circle Graphs—pp. 318–319

Objective(s): To interpret circle graphs.

9-15 Problem Solving Strategy: Make an Organized List—pp. 320–321

Objective(s): To use the strategy of making an organized list to solve problems.

12-12 Make Circle Graphs—pp. 436–437

Objective(s): To make circle graphs.

9-5 Apply Measures of Central Tendency and Range—pp. 300–301

Objective(s): To find and use the range, mean, median, and mode of a set of data.

9-6 Analyze Data—pp. 302–303

Objective(s): To identify clusters, gaps, and outliers for a set of data; to interpret and make line plots.

(C) summarize numeric data with numerical summaries, including the mean and median (measures of center) and the range and interquartile range (IQR) (measures of spread), and use these summaries to describe the center, spread, and shape of the data distribution; and

(13) Measurement and data. The student applies mathematical process standards to use numerical or graphical representations to solve problems. The student is expected to:

(A) interpret numeric data summarized in dot plots, stem-and-leaf plots, histograms, and box plots; and

*9-6A Statistical Characteristics of a Data Set—Online
Objective(s): To understand that a set of data has a distribution that can be described by its center, spread, and overall shape using dot plots; to identify whether a question is a statistical question; to find and use the mean, median, and mode of a set of data.

*9-6B Choosing the Best Measures to Describe Data—Online
Objective(s): To choose the best measures of central tendency and spread to describe a set of data.

9-7 Box-and-Whisker Plots—pp. 304–305
Objective(s): To interpret box-and-whisker plots; to make box-and-whisker plots to show the distribution of data.

*9-7A Describe Data—Online
Objective(s): To use range and interquartile range to describe the spread of a set of data; to display numerical data in dot plots; to summarize numerical data sets in relation to their context.

9-8 Stem-and-Leaf Plots—pp. 306–307
Objective(s): To make and interpret a stem-and-leaf plot.

9-12 Misleading Graphs and Statistics—pp. 314–315
Objective(s): To analyze graphs and statistics to determine if they are misleading.

9-16 Problem Solving Applications: Mixed Review—p. 322

9-5 Apply Measures of Central Tendency and Range—pp. 300–301
Objective(s): To find and use the range, mean, median, and mode of a set of data.

9-6 Analyze Data—pp. 302–303
Objective(s): To identify clusters, gaps, and outliers for a set of data; to interpret and make line plots.

*9-6A Statistical Characteristics of a Data Set—Online
Objective(s): To understand that a set of data has a distribution that can be described by its center, spread, and overall shape using dot plots; to identify whether a question is a statistical question; to find and use the mean, median, and mode of a set of data.

*9-6B Choosing the Best Measures to Describe Data—Online
Objective(s): To choose the best measures of central tendency and spread to describe a set of data.

9-7 Box-and-Whisker Plots—pp. 304–305
Objective(s): To interpret box-and-whisker plots; to make box-and-whisker plots to show the distribution of data.

*9-7A Describe Data—Online
Objective(s): To use range and interquartile range to describe the spread of a set of data; to display numerical data in dot plots; to summarize numerical data sets in relation to their context.

9-8 Stem-and-Leaf Plots—pp. 306–307
Objective(s): To make and interpret a stem-and-leaf plot.

9-1 Surveys—pp. 292–293
Objective(s): To understand what a sample is and how to select one; to use samples to make predictions.

9-6 Analyze Data—pp. 302–303
Objective(s): To identify clusters, gaps, and outliers for a set of data; to interpret and make line plots.

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	<p>*9-6A Statistical Characteristics of a Data Set—Online Objective(s): To understand that a set of data has a distribution that can be described by its center, spread, and overall shape using dot plots; to identify whether a question is a statistical question; to find and use the mean, median, and mode of a set of data.</p> <p>9-7 Box-and-Whisker Plots—pp. 304–305 Objective(s): To interpret box-and-whisker plots; to make box-and-whisker plots to show the distribution of data.</p> <p>9-8 Stem-and-Leaf Plots—pp. 306–307 Objective(s): To make and interpret a stem-and-leaf plot.</p> <p>9-13 Histograms—pp. 316–317 Objective(s): To make/use a frequency table in preparation for constructing a histogram; to make and use a histogram.</p> <p>9-16 Problem Solving Applications: Mixed Review—pp. 322–323</p>
<p>(B) distinguish between situations that yield data with and without variability.</p>	<p>*9-6B Choosing the Best Measures to Describe Data—Online Objective(s): To choose the best measures of central tendency and spread to describe a set of data.</p>
<p>(14) Personal financial literacy. The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor. The student is expected to:</p>	
<p>(A) compare the features and costs of a checking account and a debit card offered by different local financial institutions;</p>	<p>*Related content— 1-7 Addition of Whole Numbers and Decimals (checking account)—pp. 46–47 Objective(s): To add whole numbers and decimals.</p>
<p>(B) distinguish between debit cards and credit cards;</p>	<p>n/a</p>
<p>(C) balance a check register that includes deposits, withdrawals, and transfers;</p>	<p>*Related content— 1-7 Addition of Whole Numbers and Decimals (checking account)—pp. 46–47 Objective(s): To add whole numbers and decimals.</p>
<p>(D) explain why it is important to establish a positive credit history;</p>	<p>n/a</p>
<p>(E) describe the information in a credit report and how long it is retained;</p>	<p>n/a</p>
<p>(F) describe the value of credit reports to borrowers and to lenders;</p>	<p>n/a</p>
<p>(G) explain various methods to pay for college, including through savings, grants, scholarships, student loans, and work-study; and</p>	<p>n/a</p>
<p>(H) compare the annual salary of several occupations requiring various levels of post-secondary education or vocational training and calculate the effects of the different annual salaries on lifetime income.</p>	<p>n/a</p>
<p>(E) describe the information in a credit report and how long it is retained;</p>	<p>n/a</p>