G6 Common Core Math (CCSS6) Content

Module 1: Ratios and Unit Rates

Topic A: Representing and Reasoning About Ratios

Lessons 1-2: Ratios

Lessons 3-4: Equivalent Ratios

Lessons 5-6: Solving Problems by Finding Equivalent Ratios

Lesson 7: Associated Ratios and the Value of a Ratio

Lesson 8: Equivalent Ratios Defined Through the Value of a Ratio

Topic B: Collections of Equivalent Ratios

Lesson 9: Tables of Equivalent Ratios

Lesson 10: The Structure of Ratio Tables: Additive and

Multiplicative

Lesson 11: Comparing Ratios Using Ratio Tables

Lesson 12: From Ratio Tables to Double Number Line Diagrams

Lesson 13: From Ratio Tables to Equations Using the Value of the

Ratio

Lesson 14: From Ratio Tables, Equations, and Double Number Line

Diagrams to Plots on the Coordinate Plane

Lesson 15: A Synthesis of Representations of Equivalent Ratio

Collections

Mid-Module Assessment

Topic C: Unit Rates

Lesson 16: From Ratios to Rates

Lesson 17: From Rates to Ratios

Lesson 18: Finding a Rate by Dividing Two Quantities

Lessons 19-20: Comparison Shopping—Unit Price and Related

Measurement Conversions

Lessons 21-22: Getting the Job Done—Speed, Work, and

Measurement Units

Lesson 23: Problem-Solving Using Rates, Unit Rates, and

Conversions

Topic D: Percent

Lesson 24: Percent and Rates per 100

Lesson 25: A Fraction as a Percent

Lesson 26: Percent of a Quantity

Lessons 27-29: Solving Percent Problems

End-of-Module Assessment

Module 2: Arithmetic Operations Including Division of

Fractions

Topic A: Dividing Fractions by Fractions

Lessons 1–2: Interpreting Division of a Whole Number by a

Fraction—Visual Models

Lessons 3-4: Interpreting and Computing Division of a Fraction by a

Fraction-More Models

Lesson 5: Creating Division Stories

Lesson 6: More Division Stories

Lesson 7: The Relationship Between Visual Fraction Models and

Equations

Lesson 8: Dividing Fractions and Mixed Numbers

Topic B: Multi-Digit Decimal Operations—Adding, Subtracting, and

Multiplying

Lesson 9: Sums and Differences of Decimals

Lesson 10: The Distributive Property and Product of Decimals

Lesson 11: Fraction Multiplication and the Products of Decimals

Mid-Module Assessment

Topic C: Dividing Whole Numbers and Decimals

Lesson 12: Estimating Digits in a Quotient

Lesson 13: Dividing Multi-Digit Numbers Using the Algorithm

Lesson 14: The Division Algorithm—Converting Decimal Division

into Whole Number

Division Using Fractions

Lesson 15: The Division Algorithm—Converting Decimal Division

into Whole Number

Division Using Mental Math

Topic D: Number Theory—Thinking Logically About Multiplicative

Arithmetic

Lesson 16: Even and Odd Numbers

Lesson 17: Divisibility Tests for 3 and 9

Lesson 18: Least Common Multiple and Greatest Common Factor

Lesson 19: The Euclidean Algorithm as an Application of the Long

Division Algorithm

End-of-Module Assessment

Module 3: Rational Numbers

Topic A: Understanding Positive and Negative Numbers on the

Number Line

Lesson 1: Positive and Negative Numbers on the Number Line—

Opposite Direction and Value

Lessons 2-3: Real-World Positive and Negative Numbers and Zero

Lesson 4: The Opposite of a Number

Lesson 5: The Opposite of a Number's Opposite

Lesson 6: Rational Numbers on the Number Line

Topic B: Order and Absolute Value

Lessons 7–8: Ordering Integers and Other Rational Numbers

Lesson 9: Comparing Integers and Other Rational Numbers

Lesson 10: Writing and Interpreting Inequality Statements Involving Rational Numbers

Lesson 11: Absolute Value—Magnitude and Distance

Lesson 12: The Relationship Between Absolute Value and Order

Lesson 13: Statements of Order in the Real World

Mid-Module Assessment

Topic C: Rational Numbers and the Coordinate Plane

Lesson 14: Ordered Pairs

Lesson 15: Locating Ordered Pairs on the Coordinate Plane

Lesson 16: Symmetry in the Coordinate Plane

Lesson 17: Drawing the Coordinate Plane and Points on the Plane

Lesson 18: Distance on the Coordinate Plane

Lesson 19: Problem-Solving and the Coordinate Plane

End-of-Module Assessment

Module 4: Expressions and Equations

Topic A: Relationships of the Operations

Lesson 1: The Relationship of Addition and Subtraction

Lesson 2: The Relationship of Multiplication and Division

Lesson 3: The Relationship of Multiplication and Addition

Lesson 4: The Relationship of Division and Subtraction

Topic B: Special Notations of Operations

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G6 Common Core Math (CCSS6) Content

Lesson 5: Exponents

Lesson 6: The Order of Operations

Topic C: Replacing Letters and Numbers
Lesson 7: Replacing Letters with Numbers

Lesson 7: Replacing Letters with Numbers Lesson 8: Replacing Numbers with Letters

Topic D: Expanding, Factoring, and Distributing Expressions

Lesson 9: Writing Addition and Subtraction Expressions

Lesson 10: Writing and Expanding Multiplication Expressions

Lesson 11: Factoring Expressions

Lesson 12: Distributing Expressions

Lessons 13–14: Writing Division Expressions

Topic E: Expressing Operations in Algebraic Form

Lesson 15: Read Expressions in Which Letters Stand for Numbers

Lessons 16–17: Write Expressions in Which Letters Stand for Numbers

Mid-Module Assessment

Topic F: Writing and Evaluating Expressions and Formulas

Lesson 18: Writing and Evaluating Expressions—Addition and Subtraction

Lesson 19: Substituting to Evaluate Addition and Subtraction Expressions

Lesson 20: Writing and Evaluating Expressions—Multiplication and

Lesson 21: Writing and Evaluating Expressions—Multiplication and Addition

Lesson 22: Writing and Evaluating Expressions—Exponents

Topic G: Solving Equations

Lessons 23–24: True and False Number Sentences

Lesson 25: Finding Solutions to Make Equations True

Lesson 26: One-Step Equations—Addition and Subtraction

Lesson 27: One-Step Equations—Multiplication and Division

Lesson 28: Two-Step Problems—All Operations Lesson 29: Multi-Step Problems—All Operations

Topic H: Applications of Equations

Lesson 30: One-Step Problems in the Real World

Lesson 31: Problems in Mathematical Terms

Lesson 32: Multi-Step Problems in the Real World

Lesson 33: From Equations to Inequalities

Lesson 34: Writing and Graphing Inequalities in Real-World Problems

End-of-Module Assessment

Module 5: Area, Surface Area, and Volume Problems

Topic A: Area of Triangles, Quadrilaterals, and Polygons

Lesson 1: The Area of Parallelograms Through Rectangle Facts

Lesson 2: The Area of Right Triangles

Lessons 3–4: The Area of All Triangles Using Height and Base

Lesson 5: The Area of Polygons Through Composition and Decomposition

Lesson 6: Area in the Real World

Topic B: Polygons on the Coordinate Plane

Lesson 7: Distance on the Coordinate Plane

Lesson 8: Drawing Polygons in the Coordinate Plane

Lesson 9: Determining Perimeter and Area of Polygons on the Coordinate Plane

Mid-Module Assessment

Lesson 10: Distance, Perimeter, and Area in the Real World

Topic C: Volume of Right Rectangular Prisms

Lesson 11: Volume with Fractional Edge Lengths and Unit Cubes

Lesson 12: From Unit Cubes to the Formulas for Volume

Lesson 13: The Formulas for Volume

Lesson 14: Volume in the Real World

Topic D: Nets and Surface Area

Lesson 15: Representing Three-Dimensional Figures Using Nets

Lesson 16: Constructing Nets

Lesson 17: From Nets to Surface Area

Lesson 18: Determining Surface Area of Three-Dimensional Figures

Lesson 19: Surface Area and Volume in the Real World

Lesson 19a: Addendum Lesson for Modeling—Applying Surface Area and Volume to Aquariums

End-of-Module Assessment

Module 6: Statistics

Topic A: Understanding Distributions

Lesson 1: Posing Statistical Questions

Lesson 2: Displaying a Data Distribution

Lesson 3: Creating a Dot Plot

Lesson 4: Creating a Histogram

Lesson 5: Describing a Distribution Displayed in a Histogram

 $\label{topic B: Summarizing a Distribution that is Approximately Symmetric \\$

Using the Mean and Mean Absolute Deviation

Lesson 6: Describing the Center of a Distribution Using the Mean

Lesson 7: The Mean as a Balance Point

Lesson 8: Variability in a Data Distribution

Lesson 9: The Mean Absolute Deviation (MAD)

Lessons 10-11: Describing Distributions Using the Mean and MAD

Mid-Module Assessment

Topic C: Summarizing a Distribution that is Skewed Using the

Median and the Interquartile Range

Lesson 12: Describing the Center of a Distribution Using the Median

Lesson 13: Describing Variability Using the Interquartile Range (IQR)

Lesson 14: Summarizing a Distribution Using a Box Plot

Lesson 15: More Practice with Box Plots

Lesson 16: Understanding Box Plots

Topic D: Summarizing and Describing Distributions

Lesson 17: Developing a Statistical Project

Lesson 18: Connecting Graphical Representations and Numerical Summaries

Lesson 19: Comparing Data Distributions

Lesson 20: Describing Center, Variability, and Shape of a Data

Distribution from a Graphical Representation

Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape

Lesson 22: Presenting a Summary of a Statistical Project

End-of-Module Assessment

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