## 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 LineOpposite 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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Lesson 5: Exponents
Lesson 6: The Order of Operations
Topic C: Replacing Letters and 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 Division
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
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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