

6th GRADE COMMON CORE MATH

TABLE OF CONTENTS

CHAPTER ONE: RATIOS & PROPORTIONAL RELATIONSHIPS

- TOPIC A: Understanding the Concept of Ratio and Using Ratio Language (6.RP.A.1)
- TOPIC B: Unit Rate and Unit Rate Language (6.RP.A.2)
- TOPIC C: Ratio and Rate Reasoning (6.RP.A.3)
 - PART 1: Tables of Equivalent Ratios (6.RP.A.3a)
 - PART 2: Unit Rate Problems
 - Section a: Calculating Unit Price Using Proportions (6.RP.A.3b)
 - Section b: Comparing Unit Prices (6.RP.A.3c)
 - Section c: Using Rates and Ratios to Solve Problems Within Real Contexts (6.RP.A.3b)
 - PART 3: Percent Problems (6.RP.A.3c)
 - PART 4: Using Ratio Reasoning to Convert Measurement Units (6.RP.A.3d)
 - Section a: Linear Measure
 - Section b: Dry Measure
 - Section c: Liquid Measure

CHAPTER TWO: THE NUMBER SYSTEM

- TOPIC A: Quotients of Fractions (6.NS.A.1)
 - PART 1: Dividing Fractions
 - PART 2: Dividing Mixed Numbers With Unlike Denominators
 - PART 3: Division of Fractions Word Problems
 - PART 4: Reciprocals
- TOPIC B: Division of Whole Numbers (6.NS.B.2)
 - PART 1: Whole Number Divisibility Rules
 - PART 2: Dividing Multi-Digit Whole Numbers
 - PART 3: Whole Number Division Word Problems
- TOPIC C: Operations on Decimals (6.NS.B.3)
 - PART 1: Addition of Decimals
 - PART 2: Subtraction of Decimals
 - PART 3: Multiplication of Decimals
 - PART 4: Division of Decimals
 - PART 5: Decimal Word Problems
- TOPIC D: Greatest Common Factor, Least Common Multiple, and Distributive Property (6.NS.B.3)
 - PART 1: Greatest Common Factor (GCF)
 - PART 2: Least Common Multiple (LCM)
 - PART 3: Distributive Property of Multiplication
- TOPIC E: Signed Numbers and Their Relation to Zero (6.NS.C.5)
 - PART 1: Telling and Writing Temperature
 - PART 2: Change in Temperature
 - PART 3: Signed Number Word Problems
- TOPIC F: Position of Rational Numbers on the Number Line and in the Coordinate Plane (6.NS.C.6)
 - PART 1: Recognizing the Opposite of a Number (6.NS.C.6a)
 - PART 2: Understanding Signed Numbers in Quadrants and Axes Reflections (6.NS.C.6b)
 - PART 3: Positioning a Rational Number on a Number Line and Locating a Point in the Coordinate Plane (6.NS.C.6c)
 - Section a: Positioning on a Number Line
 - Section b: Locating Points in the Coordinate Plane and Translation of Points

- TOPIC G: Ordering and Absolute Value of Rational Numbers (6.NS.C.7)
PART 1: Relative Position of Numbers on a Number Line (6.NS.C.7a)
PART 2: Writing, Interpreting, and Explaining Statements of Order for Rational Numbers in Real Life Situations (6.NS.C.7b)
Section a: Ordering Rational Numbers
Section b: Largest Value of Rational Numbers
Section c: Smallest Value of Rational Numbers
Section d: Ordering Rational Numbers in Real Life Situations
PART 3: Understanding and Interpreting Absolute Value of a Rational Number (6.NS.C.7c)
Section a: Defining Absolute Value
Section b: Determining the Absolute Value of Rational Numbers (including positive and negative)
PART 4: Distinguishing Comparisons of Absolute Value From Statements About Order (6.NS.C.7d)
- TOPIC H: Solving Real-World and Mathematic Problems on the Coordinate Plane (6.NS.C.8)
PART 1: Plotting Points and Determining Coordinates
PART 2: Relative Coordinates
PART 3: Distance Between Coordinates

CHAPTER THREE: EXPRESSIONS & EQUATIONS

- TOPIC A: Writing and Evaluating Numerical Expressions Including Whole-Number Exponents (6.EE.A.1)
PART 1: Representing Repeated Multiplication in Exponential Form
PART 2: Representing Exponential Form as Repeated Multiplication
PART 3: Rules for Order of Operations
PART 4: Evaluating Numerical Expressions (Order of Operations)
Section a: Without Exponents
Section b: With Exponents
- TOPIC B: Reading, Writing, and Evaluating Algebraic Expressions (6.EE.A.2)
PART 1: Translating Between Verbal Expressions and Algebraic Expressions (6.EE.A.2a)
PART 2: Identifying Parts of an Expression Using Mathematical Terms (6.EE.A.2b)
PART 3: Using Substitution to Evaluate Algebraic Expressions (6.EE.A.2c)
PART 4: Evaluating Formulas (6.EE.A.2c)
Section a: Perimeter, Circumference, and Area
Section b: Surface Area and Volume
Section c: Rate
Section d: Population Density
Section e: Assorted Formulas
- TOPIC C: Identifying Algebraic Properties (6.EE.A.3)
- TOPIC D: Equivalent Algebraic Expressions (6.EE.A.4)
- TOPIC E: Verifying Solutions to Equations and Inequalities (6.EE.B.5)
PART 1: First Degree Equations in One Variable
PART 2: First Degree Inequalities in One Variable
- TOPIC F: Translating Real-World Problems Into Algebraic Expressions (6.EE.B.6)
- TOPIC G: Writing and Solving Algebraic Equations (6.EE.B.7)
PART 1: Translating Verbal Sentences Into Algebraic Equations
PART 2: Translating Real-World Problems Into Algebraic Equations
PART 3: Solving Equations Involving Whole Numbers Using Inverse Operations
- TOPIC H: Writing Inequalities (6.EE.B.8)
PART 1: Identifying the Graph of an Inequality
PART 2: Graphing Simple Inequalities

- PART 3: Writing Inequalities Given the Graph
- PART 4: Verbal and Real-World Inequality Problems
- TOPIC I: Using Multiple Variables to Represent Real-World Relationships (6.EE.C.9)
 - PART 1: Identifying Dependent and Independent Variables
 - PART 2: Solving Word Problems Involving Two-Variable Equations
 - PART 3: Relating Tables to Equations
 - PART 4: Relating Graphs to Equations

CHAPTER FOUR: GEOMETRY

- TOPIC A: Finding the Area of Polygons by Composing Into Rectangles or Decomposing Into Triangles (6.G.A.1)
 - PART 1: Calculating the Area of Triangles
 - PART 2: Calculating the Area of Quadrilaterals
 - PART 3: Finding the Area of Geometric Figures by Dividing or Subtracting From Polygons With Known Area
 - PART 4: Finding the Area of Geometric Figures by Breaking Down the Figure Into Polygons With Known Area
- TOPIC B: Volume of Right Rectangular Prisms (6.G.A.2) (6.G.A.4)
 - PART 1: Calculating the Volume of Cubes
 - PART 2: Finding the Volume of Rectangular Prisms by Packing With Unit Cubes
 - PART 3: Calculating Volume of a Rectangular Prism
 - PART 4: Measuring Capacity of a Rectangular Prism
 - PART 5: Estimating the Volume of Rectangular Prisms
- TOPIC C: Polygons in the Coordinate Plane (6.G.A.3)
 - PART 1: Calculating the Area of Rectangles on a Coordinate Plane
 - PART 2: Graphing Coordinates to Calculate the Area of Various Polygons
 - PART 3: Calculating the Area of Irregular Shapes on a Coordinate Plane
- TOPIC D: Using Nets to Find Surface Area of Three-Dimensional Figures (6.G.A.2) (6.G.A.4)
 - PART 1: Net Representations of Three-Dimensional Figures
 - PART 2: Surface Area and Volume
 - Section a: Surface Area
 - Section b: Volume

CHAPTER FIVE: STATISTICS & PROBABILITY

- TOPIC A: Statistical Questions and Methods of Sampling Unbiased Data (6.SP.A.1)
- TOPIC B: Describing a Data Set Using Center, Spread, and Shape (6.SP.A.2) (6.SP.A.3)
 - PART 1: Determining the Mean
 - PART 2: Determining the Mode
 - PART 3: Determining the Median
 - PART 4: Determining the Range
 - PART 5: Sets of Statistical Data
- TOPIC C: Displaying Numerical Data in Tables, Plots, and Graphs (6.SP.B.4)
- TOPIC D: Summarizing Numerical Data Sets (6.SP.B.5)
 - PART 1: Number of Observations (Recording Data in Frequency Tables) (6.SP.B.5a)
 - PART 2: Describing the Nature of the Attributes Under Investigation (6.SP.B.5b)
 - PART 3: Measures of Center and Variability (6.SP.B.5d)
 - Section a: Comparing Measures of Center to Measures of Variation
 - Section b: Interquartile Range
 - Section c: Mean Absolute Deviation
 - Section d: Outliers and Measure of Center