

Math 6 delivers instruction, practice, and review designed to develop computational fluency, deepen conceptual understanding, and apply mathematical practices. Course topics include ratios and rates, fraction and decimal operations, and signed numbers. Students continue to build their algebra skills by plotting points in all four quadrants of the coordinate plane and solving equations and inequalities. Geometry topics include area, surface area, and volume, and statistical work features measures of center and variability, box plots, dot plots, and histograms.

The two-semester course is arranged in themed units, each with three to five lessons. Each lesson includes a variety of activities such as direct instruction, application of skills, performance tasks, and formative and summative assessments. Students engage with the subject matter in an interactive, feedback-rich environment as they progress through standards-aligned content and demonstrate their learning through computer- and teacher-scored assignments. By constantly honing the ability to apply their knowledge in abstract and real-world scenarios, students build the depth of knowledge and higher-order skills required to demonstrate their mastery when put to the test.

This course is built to state standards.

Length: Two semesters

## UNIT 1: NUMBER SENSE

### LESSON 1: DIVIDING FRACTIONS

#### Study: Dividing Fractions

Use a visual model to understand fraction division. Find quotients of fractions.

Duration: 1 hr Scoring: 0 points

#### Checkup: Dividing Fractions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Dividing Fractions

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### Practice: Dividing Fractions

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Dividing Fractions

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 2: SOLVING PROBLEMS BY DIVIDING FRACTIONS

#### Study: Solving Problems by Dividing Fractions

Solve real-world problems by dividing fractions and interpreting their quotients. Write story problems to match fraction division problems, and use fraction models to illustrate solutions to story problems.

Duration: 1 hr Scoring: 0 points

#### Checkup: Solving Problems by Dividing Fractions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Solving Problems by Dividing Fractions

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Solving Problems by Dividing Fractions**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Solving Problems by Dividing Fractions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 3: DIVIDING MULTI-DIGIT WHOLE NUMBERS**

### **Study: Dividing Multi-Digit Whole Numbers**

Use long division to find quotients. Solve problems by dividing multi-digit whole numbers and interpreting their quotients and remainders.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Dividing Multi-Digit Whole Numbers**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Dividing Multi-Digit Whole Numbers**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Dividing Multi-Digit Whole Numbers**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Dividing Multi-Digit Whole Numbers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: DECIMAL OPERATIONS**

### **Study: Decimal Operations**

Add, subtract, multiply, and divide decimal numbers. Use decimal number operations to solve real-world problems.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Decimal Operations**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Decimal Operations**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Decimal Operations**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Decimal Operations**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 5: GREATEST COMMON FACTOR AND LEAST COMMON MULTIPLE**

### **Study: Greatest Common Factor and Least Common Multiple**

Learn how to find the greatest common factor (GCF) and least common multiple (LCM) of two whole numbers. Find GCFs and LCMs, and use them to solve problems.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Greatest Common Factor and Least Common Multiple**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Greatest Common Factor and Least Common Multiple**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Greatest Common Factor and Least Common Multiple**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Greatest Common Factor and Least Common Multiple**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 6: WRAP-UP: NUMBER SENSE**

### **Review: Number Sense**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): Number Sense**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 2: SIGNED NUMBERS**

### **LESSON 1: SIGNED NUMBERS**

#### **Study: Signed Numbers**

Classify numbers using a Venn Diagram. Use positive and negative numbers to represent quantities in the real world. Identify the opposite of a number, and plot opposites on a number line.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Signed Numbers**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Signed Numbers**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### **Practice: Signed Numbers**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### **Quiz: Signed Numbers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### **LESSON 2: INEQUALITIES AND COMPARISON**

#### **Study: Inequalities and Comparison**

Understand that the farther to the left on a number line a quantity is, the less it is. Write inequalities to compare numbers plotted on a number line and to compare real-world quantities.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Inequalities and Comparison**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Inequalities and Comparison**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

**Practice: Inequalities and Comparison**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Inequalities and Comparison**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 3: ABSOLUTE VALUE****Study: Absolute Value**

Understand that the absolute value of a number is its distance from 0 on a number line. See that the absolute value of a number represents its magnitude (size), and compare magnitudes of signed numbers.

Duration: 1 hr Scoring: 0 points

**Checkup: Absolute Value**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Absolute Value**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

**Practice: Absolute Value**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Absolute Value**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 4: WRAP-UP: SIGNED NUMBERS****Review: Signed Numbers**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

**Test (CS): Signed Numbers**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 3: THE COORDINATE PLANE****LESSON 1: PLOTTING POINTS ON THE COORDINATE PLANE****Study: Plotting Points on the Coordinate Plane**

Plot positive and negative rational numbers on horizontal and vertical number lines as well as on a coordinate plane.

Duration: 1 hr Scoring: 0 points

**Checkup: Plotting Points on the Coordinate Plane**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Plotting Points on the Coordinate Plane**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

**Practice: Plotting Points on the Coordinate Plane**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Plotting Points on the Coordinate Plane**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 2: QUADRANTS AND AXES**

### **Study: Quadrants and Axes**

Learn the four quadrants of a coordinate plane. Locate ordered pairs in quadrants and on axes.

Duration: 1 hr Scoring: 0 points

### **Checkup: Quadrants and Axes**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Quadrants and Axes**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Quadrants and Axes**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Quadrants and Axes**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 3: USING GRAPHS TO SOLVE PROBLEMS**

### **Study: Using Graphs to Solve Problems**

Find vertical and horizontal distances between points on a coordinate plane. Plot points to draw geometric figures and solve real-world problems.

Duration: 1 hr Scoring: 0 points

### **Checkup: Using Graphs to Solve Problems**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Using Graphs to Solve Problems**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Using Graphs to Solve Problems**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Using Graphs to Solve Problems**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: WRAP-UP: THE COORDINATE PLANE**

### **Review: The Coordinate Plane**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): The Coordinate Plane**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 4: RATIOS AND UNIT RATES

### LESSON 1: RATIOS

#### Study: Ratios

Learn the definition of a ratio. Investigate and compare ratios. Learn how to write equivalent ratios, and plot paired values on a coordinate plane.

Duration: 1 hr Scoring: 0 points

#### Checkpoint: Ratios

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Ratios

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### Practice: Ratios

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Ratios

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 2: RATES AND UNIT RATES

#### Study: Rates and Unit Rates

Learn how a rate is a special kind of ratio. Find unit rates and use them to solve problems.

Duration: 1 hr Scoring: 0 points

#### Checkpoint: Rates and Unit Rates

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Rates and Unit Rates

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### Practice: Rates and Unit Rates

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Rates and Unit Rates

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 3: SOLVING PERCENT PROBLEMS

#### Study: Percents

Write a percent as a number out of 100. Given a percent and a part or a whole, find the unknown quantity.

Duration: 1 hr Scoring: 0 points

#### Checkpoint: Solving Percent Problems

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Solving Percent Problems

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### Practice: Solving Percent Problems

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Solving Percent Problems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: UNIT CONVERSIONS

### Study: Unit Conversions

Convert measurements from larger to smaller units and vice-versa, using both proportional reasoning and a conversion factor.

Duration: 1 hr Scoring: 0 points

### Checkup: Unit Conversions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Unit Conversions

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Unit Conversions

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Unit Conversions

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 5: WRAP-UP: RATIOS AND UNIT RATES

### Review: Ratios and Rates

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### Test (CS): Ratios and Rates

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 5: NUMERICAL AND ALGEBRAIC EXPRESSIONS

### LESSON 1: EXPONENTS

#### Study: Exponents

Learn the definitions of *exponent* and *base*. Write and evaluate exponential expressions, and use them to represent real-world situations involving repeated multiplication.

Duration: 1 hr Scoring: 0 points

#### Checkup: Exponents

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Exponents

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### Practice: Exponents

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Exponents

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 2: WRITING EXPRESSIONS

### Study: Writing Expressions

Write mathematical expressions to describe quantities. Translate real-world relationships into mathematical expressions.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Writing Expressions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Writing Expressions

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Writing Expressions

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Writing Expressions

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: UNDERSTANDING PARTS OF EXPRESSIONS

### Study: Understanding Parts of Expressions

Learn the definitions of terms such as *factor* and *coefficient*. Use these terms and other mathematical language to describe and interpret parts of expressions.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Understanding Parts of Expressions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Understanding Parts of Expressions

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Understanding Parts of Expressions

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Understanding Parts of Expressions

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: EVALUATING EXPRESSIONS

### Study: Evaluating Expressions

Use the order of operations to evaluate expressions. Evaluate expressions by substituting given values for variables.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Evaluating Expressions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Evaluating Expressions

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points



**Practice: Evaluating Expressions**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Evaluating Expressions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 5: EQUIVALENT EXPRESSIONS****Study: Equivalent Expressions**

Understand what it means for two expressions to be equivalent. Use models and mathematical properties to write and identify equivalent expressions.

Duration: 1 hr Scoring: 0 points

**Checkup: Equivalent Expressions**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Equivalent Expressions**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

**Practice: Equivalent Expressions**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Equivalent Expressions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 6: WRAP-UP: NUMERICAL AND ALGEBRAIC EXPRESSIONS****Review: Numerical and Algebraic Expressions**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

**Test (CS): Numerical and Algebraic Expressions**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 6: SEMESTER WRAP-UP****LESSON 1: SEMESTER WRAP-UP****Review: Semester Review**

Prepare for the semester exam by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

**Exam: Semester Exam**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in this semester.

Duration: 1 hr 15 mins Scoring: 50 points

**UNIT 7: EQUATIONS AND INEQUALITIES PART 1****LESSON 1: SOLUTIONS OF EQUATIONS AND INEQUALITIES****Study: Solutions of Equations and Inequalities**

Learn that the solution to a mathematical sentence is a value that makes the sentence true. Use substitution to test for solutions to equations and inequalities.

Duration: 1 hr Scoring: 0 points

**Checkup: Solutions of Equations and Inequalities**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Solutions of Equations and Inequalities**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Solutions of Equations and Inequalities**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Solutions of Equations and Inequalities**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 2: WRITING EXPRESSIONS TO SOLVE PROBLEMS**

### **Study: Writing Expressions to Solve Problems**

Use variables to represent unknown quantities. Write expressions with variables to model mathematical and real-world statements.

Duration: 1 hr Scoring: 0 points

### **Checkup: Writing Expressions to Solve Problems**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Practice: Writing Expressions to Solve Problems**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Writing Expressions to Solve Problems**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 3: SOLVING EQUATIONS USING ADDITION AND SUBTRACTION**

### **Study: Solving Equations Using Addition and Subtraction**

Use inverse operations to solve one-step addition and subtraction equations.

Duration: 1 hr Scoring: 0 points

### **Checkup: Solving Equations Using Addition and Subtraction**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Solving Equations Using Addition and Subtraction**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Solving Equations Using Addition and Subtraction**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Solving Equations Using Addition and Subtraction**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: SOLVING EQUATIONS USING MULTIPLICATION AND DIVISION**

### **Study: Solving Equations Using Multiplication and Division**

Solve one-step multiplication and division equations by using inverse operations.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Solving Equations Using Multiplication and Division**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Solving Equations Using Multiplication and Division**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Solving Equations Using Multiplication and Division**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Solving Equations Using Multiplication and Division**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 5: WRAP-UP: EQUATIONS AND INEQUALITIES, PART 1**

### **Review: Equations and Inequalities, Part 1**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): Equations and Inequalities, Part 1**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 8: EQUATIONS AND INEQUALITIES PART 2**

### **LESSON 1: SOLVING INEQUALITIES**

#### **Study: Solving Inequalities**

Use your equation-solving strategies to solve inequalities. Write inequalities to represent problem situations.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Solving Inequalities**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Solving Inequalities**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### **Practice: Solving Inequalities**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### **Quiz: Solving Inequalities**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### **LESSON 2: INDEPENDENT AND DEPENDENT VARIABLES**

#### **Study: Independent and Dependent Variables**

Learn the definitions of independent and dependent variables. Understand how to identify which variable is independent and which is dependent for a given situation.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Independent and Dependent Variables**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Independent and Dependent Variables**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Independent and Dependent Variables**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Independent and Dependent Variables**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 3: MULTIPLE REPRESENTATIONS: TABLES, GRAPHS, AND EQUATIONS**

### **Study: Multiple Representations: Tables, Graphs, and Equations**

Understand that tables, graphs, and equations are different ways to show how variables are related. Learn strengths and weaknesses of each representation, and see how to use one representation to create others.

Duration: 1 hr Scoring: 0 points

### **Checkup: Multiple Representations: Tables, Graphs, and Equations**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Multiple Representations: Tables, Graphs, and Equations**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Multiple Representations: Tables, Graphs, and Equations**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Multiple Representations: Tables, Graphs, and Equations**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: WRAP-UP: EQUATIONS AND INEQUALITIES, PART 2**

### **Review: Equations and Inequalities, Part 2**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): Equations and Inequalities, Part 2**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 9: GEOMETRY**

### **LESSON 1: AREA**

#### **Study: Area**

Find areas of triangles and irregular polygons. Use area to solve real-world problems.

Duration: 1 hr Scoring: 0 points

#### **Checkup: Area**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Area**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### **Practice: Area**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Area

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 2: VOLUME

### Study: Volume

Find volumes of rectangular prisms to solve real-world and mathematical problems.

Duration: 1 hr Scoring: 0 points

### Checkup: Volume

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Volume

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Volume

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Volume

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: COORDINATE GEOMETRY

### Study: Coordinate Geometry

Draw geometric figures on a coordinate plane by plotting and joining vertices. Find lengths of horizontal or vertical sides by subtracting coordinates.

Duration: 1 hr Scoring: 0 points

### Checkup: Coordinate Geometry

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Coordinate Geometry

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Coordinate Geometry

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Coordinate Geometry

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: SOLID FIGURES

### Study: Solid Figures

Use nets to show the surfaces of solid figures. Identify a solid figure from its net. Find surface areas by using nets.

Duration: 1 hr Scoring: 0 points

### Checkup: Solid Figures

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Solid Figures

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Solid Figures**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Solid Figures**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 5: WRAP-UP: GEOMETRY**

### **Review: Geometry**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): Geometry**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 10: INTRODUCTION TO STATISTICS**

### **LESSON 1: STATISTICAL QUESTIONS AND DATA DISTRIBUTIONS**

#### **Study: Statistical Questions and Data Distributions**

Learn how to identify statistical questions. Using dot plots, describe data sets by their center, spread, and shape.

Duration: 1 hr Scoring: 0 points

#### **Checkup: Statistical Questions and Data Distributions**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Statistical Questions and Data Distributions**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### **Practice: Statistical Questions and Data Distributions**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### **Quiz: Statistical Questions and Data Distributions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### **LESSON 2: MEASURES OF CENTER AND VARIABILITY**

#### **Study: Measures of Center and Variability**

Learn the definitions of *mean*, *median*, and *range*. Find means, medians, and ranges of data sets.

Duration: 1 hr Scoring: 0 points

#### **Checkup: Measures of Center and Variability**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Measures of Center and Variability**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

#### **Practice: Measures of Center and Variability**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Measures of Center and Variability

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: BOX PLOTS

### Study: Box Plots

Find medians, quartiles, and extreme values for data sets. Use these key values to make box plots.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Box Plots

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Box Plots

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Box Plots

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Box Plots

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: DOT PLOTS, HISTOGRAMS, AND STEM-AND-LEAF PLOTS

### Study: Dot Plots, Histograms, and Stem-and-Leaf Plots

Make dot plots, histograms, and stem-and-leaf plots of data sets. Decide which data display to use in a given situation.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Dot Plots, Histograms, and Stem-and-Leaf Plots

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Dot Plots, Histograms, and Stem-and-Leaf Plots

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### Practice: Dot Plots, Histograms, and Stem-and-Leaf Plots

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Dot Plots, Histograms, and Stem-and-Leaf Plots

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 5: WRAP-UP: INTRODUCTION TO STATISTICS

### Review: Introduction to Statistics

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### Test (CS): Introduction to Statistics

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 11: SUMMARIZING DATA

### LESSON 1: COLLECTING DATA

#### Study: Collecting Data

Learn how to collect and summarize statistical data. Understand the importance of the number of observations and the units chosen for the usefulness of the data.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Collecting Data**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Collecting Data**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Collecting Data**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Collecting Data**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 2: SUMMARIZING DATA USING MEASURES OF CENTER AND VARIABILITY**

### **Study: Summarizing Data Using Measures of Center and Variability**

Understand mean, median, interquartile range, and mean absolute deviation as measures of center and variability, and use them to describe data sets. Identify patterns in data.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Summarizing Data Using Measures of Center and Variability**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Summarizing Data Using Measures of Center and Variability**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Summarizing Data Using Measures of Center and Variability**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Summarizing Data Using Measures of Center and Variability**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 3: CHOOSING APPROPRIATE MEASURES TO SUMMARIZE DATA SETS**

### **Study: Choosing Appropriate Measures to Summarize Data Sets**

Understand how extreme data values impact the measures of center and spread, and how to choose the measures to use when describing a data set.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Choosing Appropriate Measures to Summarize Data Sets**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Choosing Appropriate Measures to Summarize Data Sets**

Review important ideas and skills from this lesson.

Duration: 0 hrs 5 mins Scoring: 0 points

### **Practice: Choosing Appropriate Measures to Summarize Data Sets**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points



### **Quiz: Choosing Appropriate Measures to Summarize Data Sets**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: WRAP-UP: SUMMARIZING DATA**

### **Review: Summarizing Data**

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): Summarizing Data**

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 12: SEMESTER 2 EXAM**

### **LESSON 1: SEMESTER WRAP UP**

#### **Review: Semester Review**

Prepare for the semester exam by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

#### **Exam: Semester Exam**

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in this semester.

Duration: 1 hr 15 mins Scoring: 50 points