

Math 7 delivers instruction, practice, and review designed to develop computational fluency, deepen conceptual understanding, and apply mathematical practices. Throughout the course, students gain a deep understanding of proportions and their use in solving problems. They extend their fluency with operations on rational numbers and translate among different forms of rational numbers. Algebra topics include simplifying and rewriting algebraic expressions and solving more complex equations and inequalities. Students also sketch geometric figures and explore scale drawings, investigate circle properties and angle relationships, and deepen their understanding of area, volume, and surface area. They see how statistics uses sample data to make predictions about populations and compare data from different data sets. Students gain a fundamental understanding of probability and explore different ways to find or estimate probabilities.

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: OPERATIONS ON RATIONAL NUMBERS

### LESSON 1: FRACTIONS

#### Study: Fractions

Add, subtract, multiply, and divide fractions and mixed numbers.

Duration: 1 hr Scoring: 0 points

#### Checkup: Fractions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Fractions

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### Practice: Fractions

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Fractions

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 2: SOLVING PROBLEMS WITH FRACTIONS

#### Study: Solving Problems with Fractions

Solve one-step and multistep practical problems involving addition, subtraction, multiplication, and division of fractions and mixed numbers.

Duration: 1 hr Scoring: 0 points

#### Checkup: Solving Problems with Fractions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Solving Problems with Fractions**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Solving Problems with Fractions**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Solving Problems with Fractions**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 3: EXPRESSING RATIONAL NUMBERS IN DECIMAL FORM**

### **Study: Expressing Rational Numbers in Decimal Form**

Classify numbers using a Venn Diagram. Understand that some numbers are not rational. Use division to rewrite fractions as decimals. See that this division may result in a repeating decimal, and learn how to write repeating decimals.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Expressing Rational Numbers in Decimal Form**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Expressing Rational Numbers in Decimal Form**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Expressing Rational Numbers in Decimal Form**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Expressing Rational Numbers in Decimal Form**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: USING OPERATIONS ON RATIONAL NUMBERS TO SOLVE PROBLEMS**

### **Study: Using Operations on Rational Numbers to Solve Problems**

Use the order of operations to simplify expressions with rational numbers. Solve real-world and mathematical problems involving multiplication, division, addition, and subtraction.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Using Operations on Rational Numbers to Solve Problems**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Using Operations on Rational Numbers to Solve Problems**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Using Operations on Rational Numbers to Solve Problems**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Using Operations on Rational Numbers to Solve Problems**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 5: WRAP-UP: OPERATIONS ON RATIONAL NUMBERS**

**Review: Operations on Rational Numbers**

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

Duration: 0 hrs 20 mins Scoring: 0 points

**Test (CS): Operations on Rational Numbers**

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

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 2: RATE, RATIO, AND PROPORTION****LESSON 1: UNIT RATES****Study: Unit Rates**

Compute unit rates and use them to solve problems.

Duration: 1 hr Scoring: 0 points

**Checkpoint: Unit Rates**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Unit Rates**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

**Practice: Unit Rates**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Unit Rates**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 2: IDENTIFYING PROPORTIONAL RELATIONSHIPS****Study: Identifying Proportional Relationships**

Know how to identify proportional quantities by looking for constant ratios and by graphing.

Duration: 1 hr Scoring: 0 points

**Checkpoint: Identifying Proportional Relationships**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Identifying Proportional Relationships**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

**Practice: Identifying Proportional Relationships**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Identifying Proportional Relationships**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 3: ANALYZING PROPORTIONAL RELATIONSHIPS****Study: Analyzing Proportional Relationships**

Understand the importance of the constant of proportionality. Find the constant of proportionality from a table, a graph, an equation, or a real-world relationship.

Duration: 1 hr Scoring: 0 points

**Checkpoint: Analyzing Proportional Relationships**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Analyzing Proportional Relationships**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Analyzing Proportional Relationships**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Analyzing Proportional Relationships**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: REPRESENTING PROPORTIONAL RELATIONSHIPS**

### **Study: Representing Proportional Relationships**

Interpret proportional relationships from a graph. Know how to interpret points on the graph of a proportion and write an equation to represent the proportional relationship.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Representing Proportional Relationships**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Representing Proportional Relationships**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Representing Proportional Relationships**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Representing Proportional Relationships**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 5: USING PROPORTIONS TO SOLVE PROBLEMS**

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

Use proportions to solve problems involving percents. Find a percent increase or decrease, and calculate taxes and discounts.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Using Proportions to Solve Problems**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

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

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

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

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

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

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 6: WRAP-UP: RATE, RATIO, AND PROPORTION

### Review: Rate, Ratio, and Proportion

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

Duration: 0 hrs 30 mins Scoring: 0 points

### Test (CS): Rate, Ratio, and Proportion

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

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 3: ADDITION AND SUBTRACTION OF RATIONAL NUMBERS

### LESSON 1: ADDING RATIONAL NUMBERS

#### Study: Adding Rational Numbers

Add positive and negative rational numbers. Use a number line to show addition of signed numbers.

Duration: 1 hr Scoring: 0 points

#### Checkup: Adding Rational Numbers

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Adding Rational Numbers

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### Practice: Adding Rational Numbers

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Adding Rational Numbers

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 2: SUBTRACTING RATIONAL NUMBERS

#### Study: Subtracting Rational Numbers

See that subtracting a number is the same as adding its opposite. Use subtraction of rational numbers, including signed numbers, to solve problems.

Duration: 1 hr Scoring: 0 points

#### Checkup: Subtracting Rational Numbers

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Subtracting Rational Numbers

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### Practice: Subtracting Rational Numbers

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Subtracting Rational Numbers

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 3: USING PROPERTIES TO ADD AND SUBTRACT RATIONAL NUMBERS

#### Study: Using Properties to Add and Subtract Rational Numbers

Use the commutative, associative, and distributive properties in addition problems. Apply these properties to make problems simpler, rewriting subtraction as addition of the opposite when necessary.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Using Properties to Add and Subtract Rational Numbers**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Using Properties to Add and Subtract Rational Numbers**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Using Properties to Add and Subtract Rational Numbers**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Using Properties to Add and Subtract Rational Numbers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: WRAP-UP: ADDITION AND SUBTRACTION OF RATIONAL NUMBERS**

### **Review: Addition and Subtraction of Rational Numbers**

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

Duration: 0 hrs 30 mins Scoring: 0 points

### **Test (CS): Addition and Subtraction of Rational Numbers**

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

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 4: MULTIPLICATION AND DIVISION OF RATIONAL NUMBERS**

### **LESSON 1: MULTIPLYING RATIONAL NUMBERS**

#### **Study: Multiplying Rational Numbers**

Discover the rules for multiplying signed numbers. Solve problems involving multiplication of rational numbers. Given an equation, write a problem it could model.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Multiplying Rational Numbers**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Multiplying Rational Numbers**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### **Practice: Multiplying Rational Numbers**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### **Quiz: Multiplying Rational Numbers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### **LESSON 2: DIVIDING RATIONAL NUMBERS**

#### **Study: Dividing Rational Numbers**

Learn that the sign rules for division are the same as the rules for multiplication. Understand how to divide fractions, and understand that division by zero is undefined.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Dividing Rational Numbers**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Review: Dividing Rational Numbers**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

**Practice: Dividing Rational Numbers**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Dividing Rational Numbers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 3: USING PROPERTIES TO MULTIPLY AND DIVIDE RATIONAL NUMBERS****Study: Using Properties to Multiply and Divide Rational Numbers**

Learn how to use properties when multiplying and dividing signed numbers. See how to rewrite division as multiplication by the reciprocal. Apply properties to make multiplication simpler.

Duration: 1 hr Scoring: 0 points

**Checkup: Using Properties to Multiply and Divide Rational Numbers**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

**Practice: Using Properties to Multiply and Divide Rational Numbers**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

**Quiz: Using Properties to Multiply and Divide Rational Numbers**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

**LESSON 4: WRAP-UP: MULTIPLICATION AND DIVISION OF RATIONAL NUMBERS****Review: Multiplication and Division of Rational Numbers**

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

Duration: 0 hrs 30 mins Scoring: 0 points

**Test (CS): Multiplication and Division of Rational Numbers**

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

Duration: 0 hrs 45 mins Scoring: 30 points

**UNIT 5: EXPRESSIONS****LESSON 1: WRITING EXPRESSIONS****Study: Writing Expressions**

Understand the difference between expressions and equations. Translate verbal phrases into algebraic expressions.

Duration: 1 hr Scoring: 0 points

**Checkup: 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 10 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 2: SIMPLIFYING AND REWRITING ALGEBRAIC EXPRESSIONS

### Study: Simplifying and Rewriting Algebraic Expressions

Learn how to simplify algebraic expressions by combining like terms. Add, subtract, factor, and expand linear expressions.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Simplifying and Rewriting Algebraic Expressions

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Simplifying and Rewriting Algebraic Expressions

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Simplifying and Rewriting Algebraic Expressions

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Simplifying and Rewriting Algebraic Expressions

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: SOLVING MULTISTEP PROBLEMS WITH RATIONAL NUMBERS

### Study: Solving Multistep Problems with Rational Numbers

Solve algebraic and real-world multistep problems that include mixed numbers, decimals, and signed numbers, and require the correct use of mathematical properties and the order of operations. Use estimation strategies to assess the reasonableness of answers.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Solving Multistep Problems with Rational Numbers

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Solving Multistep Problems with Rational Numbers

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Solving Multistep Problems with Rational Numbers

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Solving Multistep Problems with Rational Numbers

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: WRAP-UP: EXPRESSIONS

### Review: Expressions

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

Duration: 0 hrs 30 mins Scoring: 0 points

### Test (CS): 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 20 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

### LESSON 1: SOLVING TWO-STEP EQUATIONS

#### Study: Solving Two-Step Equations

Review solving one-step equations, and then use inverse operations to solve two-step equations. Solve problems that involve fractions, decimals, and the distributive property.

Duration: 1 hr Scoring: 0 points

#### Checkpoint: Solving Two-Step Equations

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Practice: Solving Two-Step Equations

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Solving Two-Step Equations

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 2: USING EQUATIONS TO SOLVE PROBLEMS

#### Study: Using Equations to Solve Problems

Write and solve an algebraic equation from a real-world context. Given an equation, write a word problem that it could represent.

Duration: 1 hr Scoring: 0 points

#### Checkpoint: Using Equations to Solve Problems

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Practice: Using Equations to Solve Problems

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Using Equations to Solve Problems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 3: SOLVING LINEAR INEQUALITIES

#### Study: Solving Linear Inequalities

Write inequalities to represent problems. Solve inequalities algebraically and show the solutions on a number line. See that multiplying or dividing both sides of an inequality by a negative number reverses the inequality sign.

Duration: 1 hr Scoring: 0 points

#### Checkpoint: Solving Linear Inequalities

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Solving Linear Inequalities

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

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

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

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

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**

### **Review: Equations and Inequalities**

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

Duration: 0 hrs 20 mins Scoring: 0 points

### **Test (CS): Equations and Inequalities**

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

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 8: GEOMETRIC FIGURES**

### **LESSON 1: SCALE DRAWINGS**

#### **Study: Scale Drawings**

Understand that a scale drawing represents a real object, but is a different size. Know the role of the scale factor. Use scale drawings to compute lengths and areas of real objects.

Duration: 1 hr Scoring: 0 points

#### **Checkup: Scale Drawings**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Scale Drawings**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### **Practice: Scale Drawings**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### **Quiz: Scale Drawings**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### **LESSON 2: GEOMETRIC DRAWINGS**

#### **Study: Geometric Drawings**

Use a protractor and ruler to draw geometric figures. Given three measurements for a triangle, determine whether it is possible to draw 0, 1, or more than one such triangle.

Duration: 1 hr Scoring: 0 points

#### **Checkup: Geometric Drawings**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Geometric Drawings**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### **Practice: Geometric Drawings**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Geometric Drawings

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: CROSS-SECTIONS OF GEOMETRIC SOLIDS

### Study: Cross-Sections of Geometric Solids

Learn the meaning of the cross-section of a solid. Identify cross-sections for different figures, especially prisms and pyramids.

Duration: 1 hr Scoring: 0 points

### Checkup: Cross-Sections of Geometric Solids

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Cross-Sections of Geometric Solids

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Cross-Sections of Geometric Solids

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Cross-Sections of Geometric Solids

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: WRAP-UP: GEOMETRIC FIGURES

### Review: Geometric Figures

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

Duration: 0 hrs 20 mins Scoring: 0 points

### Test (CS): Geometric Figures

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 IN TWO AND THREE DIMENSIONS

### LESSON 1: CIRCLES

#### Study: Circles

Learn the parts of a circle. Understand the number pi. Learn and apply the circumference and area formulas for a circle.

Duration: 1 hr Scoring: 0 points

#### Checkup: Circles

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Circles

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### Practice: Circles

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Circles

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 2: ANGLE RELATIONSHIPS

### Study: Angle Relationships

Explore relationships between different types of angles, including vertical, adjacent, complementary, and supplementary angles. Use these relationships to find unknown angle measures.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Angle Relationships

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Angle Relationships

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Angle Relationships

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Angle Relationships

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: AREA

### Study: Area

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

Duration: 1 hr Scoring: 0 points

### Checkpoint: Area

Check your understanding of the lesson.

Duration: 0 hrs 20 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 4: VOLUME AND SURFACE AREA

### Study: Volume and Surface Area

Students will solve mathematical and real-world volume and surface area problems involving rectangular and triangular prisms and composite solids. Students will also identify how changing one side length of a rectangular prism affects its volume and surface area.

Duration: 1 hr Scoring: 0 points

### Checkpoint: Volume and Surface Area

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Volume and Surface Area

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Volume and Surface Area

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Volume and Surface Area

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 5: WRAP-UP: GEOMETRY IN TWO AND THREE DIMENSIONS

### Review: Geometry in Two and Three Dimensions

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

Duration: 0 hrs 20 mins Scoring: 0 points

### Test (CS): Geometry in Two and Three Dimensions

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

Duration: 0 hrs 45 mins Scoring: 30 points

## UNIT 10: STATISTICS AND SAMPLING

### LESSON 1: POPULATIONS AND SAMPLES

#### Study: Populations and Samples

Learn the difference between a population and a statistical sample. Learn about the importance of taking a representative sample, and see how to make predictions based on random samples.

Duration: 1 hr Scoring: 0 points

#### Checkup: Populations and Samples

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Populations and Samples

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### Practice: Populations and Samples

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Populations and Samples

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 2: COMPARING DATA SETS

#### Study: Comparing Data Sets

Practice finding the mean absolute deviation (MAD) for a data set. Use the MAD as a way to compare the means of two data sets.

Duration: 1 hr Scoring: 0 points

#### Checkup: Comparing Data Sets

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### Review: Comparing Data Sets

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### Practice: Comparing Data Sets

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### Quiz: Comparing Data Sets

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### LESSON 3: USING STATISTICAL MEASURES TO COMPARE DATA SETS

### **Study: Using Statistical Measures to Compare Data Sets**

Use means and medians to compare the centers of data sets. Use ranges and MADs to compare the variabilities of data sets. Compare populations based on sample data.

Duration: 1 hr Scoring: 0 points

### **Checkpoint: Using Statistical Measures to Compare Data Sets**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### **Review: Using Statistical Measures to Compare Data Sets**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### **Practice: Using Statistical Measures to Compare Data Sets**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### **Quiz: Using Statistical Measures to Compare Data Sets**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## **LESSON 4: WRAP-UP: STATISTICS AND SAMPLING**

### **Review: Statistics and Sampling**

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

Duration: 0 hrs 20 mins Scoring: 0 points

### **Test (CS): Statistics and Sampling**

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

Duration: 0 hrs 45 mins Scoring: 30 points

## **UNIT 11: PROBABILITY**

### **LESSON 1: PROBABILITY**

#### **Study: Probability**

Understand that the likelihood of an event, called the probability, is a number from 0 (impossible) to 1 (certain). Use the fraction of times an event is observed to estimate its probability.

Duration: 1 hr Scoring: 0 points

#### **Checkpoint: Probability**

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

#### **Review: Probability**

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

#### **Practice: Probability**

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

#### **Quiz: Probability**

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

### **LESSON 2: CALCULATING PROBABILITY**

#### **Study: Calculating Probability**

Find the probabilities of equally-likely outcomes and events that include more than one equally-likely outcome. Estimate probabilities based on experimental results.

Duration: 1 hr Scoring: 0 points

### Checkup: Calculating Probability

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Calculating Probability

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Calculating Probability

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Calculating Probability

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 3: PROBABILITY OF COMPOUND EVENTS

### Study: Probability of Compound Events

Learn the definition of *compound event*. Use lists, tables, tree diagrams, and multiplication to identify the outcomes in a compound event.

Duration: 1 hr Scoring: 0 points

### Checkup: Probability of Compound Events

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Probability of Compound Events

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Probability of Compound Events

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Probability of Compound Events

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 4: SIMULATIONS

### Study: Simulations

See how to use simulations to estimate an unknown probability. Design simulations using coins, number cubes, and random digits.

Duration: 1 hr Scoring: 0 points

### Checkup: Simulations

Check your understanding of the lesson.

Duration: 0 hrs 20 mins Scoring: 0 points

### Review: Simulations

Review important ideas and skills from this lesson.

Duration: 0 hrs 10 mins Scoring: 0 points

### Practice: Simulations

Submit your work for a set of practice problems.

Duration: 0 hrs 30 mins Scoring: 10 points

### Quiz: Simulations

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 15 mins Scoring: 10 points

## LESSON 5: WRAP-UP: PROBABILITY

### Review: Probability

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

Duration: 0 hrs 20 mins Scoring: 0 points

### Test (CS): Probability

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 20 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