

Mathematics Grade 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

Checkpoint: 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

Checkpoint: 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

Checkpoint: 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