

Florida Math for College Readiness provides a fourth-year math curriculum focused on developing the mastery of skills identified as critical to postsecondary readiness in math. This full-year course is aligned with Florida's Postsecondary Readiness Competencies in mathematics and targets students who are required to complete additional instruction based on their performance on the Postsecondary Education Readiness Test (PERT).

Course topics include solving equations with addition, subtraction, multiplication and division; fractions and decimals; inequalities; functions and sequences; systems of equations; polynomials; factoring quadratic equations; rational expressions; and data analysis.

Throughout the course, students are supplied with scaffolded note-taking guides, called Study Sheets, as well as post-study Checkup activities that provide them the opportunity to hone their computational skills by working through a low-stakes, 10-question problem set before moving on to formal assessment. Formative assessments help students to understand areas of weakness and improve performance, while summative assessments chart progress and skill development.

The content is specifically aligned with the Florida Postsecondary Readiness Competencies.

Length: Two Semesters

## UNIT 1: INTEGERS AND OPERATIONS

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### LESSON 1: THE OPERATIONS ON A NUMBER LINE

#### **Study: The Operations on a Number Line**

Explore using a number line to evaluate numerical expressions.

*Duration: 0*

*hr 40 min*

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### LESSON 2: ADDING INTEGERS

#### **Study: Adding Integers**

Learn about adding integers with and without a number line.

*Duration: 0 hr 40 min*

#### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

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**Quiz: Adding Integers (Basic)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*20 points*

**Quiz: Adding Integers (Advanced)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 18 points*

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**LESSON 3: SUBTRACTING INTEGERS****Study: Subtracting Integers**

Learn about subtracting negative integers by using a number line and by adding the opposite number (calculating).

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

**Quiz: Subtracting Integers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20*

*points*

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**LESSON 4: MULTIPLYING INTEGERS****Study: Multiplying Integers**

Learn the rules for multiplying a positive and negative integer and for multiplying two negative integers.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

**Quiz: Multiplying Integers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20*

*points*

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**LESSON 5: DIVIDING INTEGERS**

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**Study: Dividing Integers**

Learn the rules for dividing a positive and negative integer and for dividing two negative integers.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

**Quiz: Dividing Integers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20 points*

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**LESSON 6: INTEGERS AND OPERATIONS****Study: Integers and Operations**

Review sets; subsets; elements; whole numbers; positive and negative integers; the number line; absolute value; arithmetic operations and their properties; and the order of operations.

*Duration: 0 hr 50 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Properties of Operations**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 28 points*

**Quiz: Order of Operations**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 18 points*

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**LESSON 7: INTEGERS AND OPERATIONS WRAP-UP****Test (CS): Integers and Operations**

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

*Duration: 1 hr Scoring: 75 points*

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**LESSON 8: DIAGNOSTIC**

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## Diagnostic: Integers and Operations

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 20 min Scoring: 32 points*

## UNIT 2: FRACTIONS, DECIMALS, AND PERCENTS

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### LESSON 1: TYPES OF NUMBERS

#### Study: Types of Numbers

Learn about different types of real numbers, including exponents decimals and percents. Compare numbers of different types and formats using a number line.

*Duration: 0 hr 50 min Scoring: 0 points*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

*Scoring: 0 points*

#### Quiz: Types of Numbers

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20*

*points*

#### Quiz: Rational and Irrational Numbers

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min*

*Scoring: 12 points*

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### LESSON 2: INTRODUCTION TO FRACTION ARITHMETIC

#### Study: Introduction to Fraction Arithmetic

Learn about adding and subtracting fractions with like denominators, multiplying a fraction by an integer, and multiplying fractions.

*Duration: 0 hr 40 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

#### Quiz: Adding and Subtracting Like Fractions

Take a quiz to assess your understanding of the material.

*Duration: 0 hr  
25 min Scoring: 20 points*

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### **Quiz: Multiplying Fractions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20 points*

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## **LESSON 3: EQUIVALENT FRACTIONS**

### **Study: Equivalent Fractions**

Learn about building equivalent fractions in order to add and subtract fractions with unlike denominators. Learn about comparing equivalent fractions.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Adding and Subtracting Unlike Fractions**

Take a quiz to assess your understanding of the material.

*Duration: 0*

*hr 25 min Scoring: 18 points*

### **Quiz: Comparing Unlike Fractions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

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## **LESSON 4: SIMPLIFYING FRACTIONS**

### **Study: Simplifying Fractions**

Learn about finding common factors; dividing numerators and denominators by a common factor in order to simplify a fraction; putting a fraction in lowest terms; prime and composite numbers; and using a factor tree to find prime factorization.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Practice: Prime Factorization Tool**

Practice using a prime factorization tool to find factors of numbers.

*Duration: 0 hr 30*

*min Scoring: 25 points*

### **Quiz: Finding Common Denominators**

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Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

### **Quiz: Dividing by Common Factors**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

### **Quiz: Simplifying Fractions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

### **Quiz: Prime and Composite Numbers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

### **Quiz: Prime Factorization**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

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## **LESSON 5: MIXED NUMBERS**

### **Study: Mixed Numbers**

Learn about proper and improper fractions, writing improper fractions as mixed numbers, and converting mixed numbers to improper fractions.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Converting Improper Fractions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

### **Quiz: Converting Mixed Numbers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

## LESSON 6: DIVIDING FRACTIONS

### Study: Dividing Fractions

Learn the definition of reciprocals. Learn about finding reciprocals of fractions in order to divide them.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Finding Reciprocals

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

### Quiz: Dividing Fractions

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

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## LESSON 7: ADDING AND SUBTRACTING FRACTIONS

### Study: Adding and Subtracting Fractions

Learn about the smallest common denominator (the least common multiple of denominators) and about using prime factorization to find the least common multiple.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Adding and Subtracting Unlike Fractions

Take a quiz to assess your understanding of the material.

*Duration: 0*

*hr 25 min Scoring: 16 points*

### Quiz: Solving Equations with Fractions

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 16 points*

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## LESSON 8: FRACTIONS, DECIMALS, AND PERCENTS

**Study: Fractions, Decimals, and Percents**

Review fraction terminology (including "numerator" and "denominator"); performing operations with fractions; real (rational and irrational) numbers; equivalent fractions; prime numbers and factorization; least common multiples; reciprocals; and converting fractions to decimals and percents.

*Duration: 0 hr 50 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Like Denominators**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 16*

*points*

**Quiz: Equivalent Fractions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20*

*points*

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**LESSON 9: THE SET OF RATIONAL NUMBERS****Study: The Set of Rational Numbers**

Learn about rational and irrational numbers and pi.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

**Quiz: Rational Numbers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

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**LESSON 10: REPEATING DECIMALS****Study: Repeating Decimals**

Use division to convert a fraction to a decimal. Identify repeating decimals and repeating patterns. Learn how to write a repeating decimal so that it has the exact value as its corresponding fraction.

*Duration: 0 hr*

*30 min*

**Checkup: Practice Problems**



Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Repeating Decimals**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 10*

*points*

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## **LESSON 11: FRACTIONS, DECIMALS, AND PERCENTS WRAP-UP**

### **Test (CS): Fractions, Decimals, and Percents**

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

*Duration: 1 hr Scoring: 75 points*

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## **LESSON 12: DIAGNOSTIC**

### **Diagnostic: Fractions, Decimals, and Percents**

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 30 min Scoring: 43 points*

## **UNIT 3: EXPONENTS**

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### **LESSON 1: EXPONENTS**

#### **Study: Exponents**

Review exponents and their place in the order of operations. Learn ways to evaluate exponential expressions. Learn about fractional and decimal exponents, radical notation, square roots, and scientific notation.

*Duration:*

*0 hr 40 min Scoring: 0 points*

#### **Checkup: Practice Problems**

Check your understanding of the lesson.

*Duration: 0 hr 30 min Scoring: 0 points*

#### **Quiz: Exponential Expressions**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 25*

*min Scoring: 20 points*

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### **Quiz: Operations with Radicals**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 25*

*min Scoring: 20 points*

### **Quiz: Scientific Notation**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 25 min*

*Scoring: 20 points*

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## **LESSON 2: DEFINITIONS AND EXAMPLES OF EXPONENTS**

### **Study: Definitions and Examples of Exponents**

Learn the definitions of base exponent power and exponential expression. Learn to use a table to illustrate real-world applications of exponents.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Definitions and Examples of Exponents**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*20 min Scoring: 10 points*

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## **LESSON 3: OPERATIONS WITH EXPONENTS**

### **Study: Operations with Exponents**

Learn about evaluating expressions with exponents using the order of operations.

*Duration: 0 hr 50 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Operations with Exponents**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min*

*Scoring: 20 points*

### **Quiz: Operations with Radicals**

Take a quiz to check your understanding of what you have learned.

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*Duration: 0 hr 20  
min Scoring: 20 points*

### **Quiz: Scientific Notation**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 20 min  
Scoring: 20 points*

### **Quiz: Exponents in Geometry**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 10 min  
Scoring: 10 points*

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## **LESSON 4: EXPONENTS AND THE ORDER OF OPERATIONS**

### **Study: Exponents and the Order of Operations**

Learn about evaluating expressions with exponents using the order of operations.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Exponents and the Order of Operations**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr  
20 min Scoring: 10 points*

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## **LESSON 5: LAWS OF EXPONENTS**

### **Study: Laws of Exponents**

Learn about the multiplication law of exponents with positive and negative exponents; the rule for negative exponents; the division law of exponents; raising products and fractions to a power; and the power rule of exponents.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: The Multiplication Law of Exponents**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20*

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## LESSON 6: SCIENTIFIC NOTATION

### Study: Scientific Notation

Learn about expressing large numbers using scientific notation and about the form of scientific notation. Explore examples from elementary science.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Scientific Notation

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 10 points*

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## LESSON 7: EXPONENTS WRAP-UP

### Test (CS): Exponents

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

*Duration: 1 hr Scoring: 75 points*

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## LESSON 8: DIAGNOSTIC

### Diagnostic: Exponents

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 22 points*

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## UNIT 4: SOLVING EQUATIONS

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## LESSON 1: VARIABLES AND PROBLEM SOLVING

### Study: Variables and Problem Solving

Review what a variable is, and how to form and use variable expressions to solve problems.

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*Duration: 0 hr 50 min Scoring: 0 points*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

*Scoring: 0 points*

### **Quiz: Variable Expressions**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 25 min*

*Scoring: 20 points*

### **Quiz: Mathematical Sentences**

Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 25*

*min Scoring: 20 points*

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## **LESSON 2: VARIABLE EXPRESSIONS**

### **Study: Variable Expressions**

Define and form variable expressions by performing operations.

*Duration: 0 hr 30 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Variable Expressions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 9*

*points*

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## **LESSON 3: MATHEMATICAL SENTENCES**

### **Study: Mathematical Sentences**

Learn about the types and parts of mathematical sentences. Learn to turn word problems into mathematical sentences.

*Duration: 0 hr 40 min Scoring: 0 points*

### **Checkup: Practice Problems**

Check your understanding of the lesson.

*Duration: 0 hr 30 min Scoring: 0 points*

### **Quiz: Mathematical Sentences**

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Take a quiz to check your understanding of what you have learned.

*Duration: 0 hr 25*

*min Scoring: 20 points*

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## LESSON 4: SOLVING WITH ADDITION AND SUBTRACTION

### **Study: Solving with Addition and Subtraction**

Review isolating variables, using a number line to solve equations, and solution sets for inequalities.

*Duration: 0 hr 50 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

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

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16 points*

### **Quiz: Solving Inequalities with Addition and Subtraction**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16 points*

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## LESSON 5: SOLVING WITH MULTIPLICATION AND DIVISION

### **Study: Solving with Multiplication and Division**

Review solving equations involving multiplication, including by using a number line; solving equations involving division, including by using a number line; and solving inequalities with multiplication and division.

*Duration: 0 hr 50 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Solving Equations with Multiplication**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*25 min Scoring: 16 points*

### **Quiz: Solving Equations with Division**

Take a quiz to assess your understanding of the material.

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*Duration: 0 hr 25 min*  
*Scoring: 16 points*

### **Quiz: Solving Inequalities with Multiplication and Division**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 22 points*

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## **LESSON 6: VARIABLES ON BOTH SIDES OF THE EQUATION**

### **Study: Variables on Both Sides of the Equation**

Learn about adding or subtracting variable expressions from both sides of an equation and about collecting variable terms on one side of an equation. Learn about equations with no solution.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Variables on Both Sides of the Equation - Basic**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 10 points*

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## **LESSON 7: SOLVING MULTISTEP LINEAR EQUATIONS**

### **Study: Solving Multistep Linear Equations**

Review collecting like terms, using both addition/subtraction and multiplication/division and identifying equations that are never or always true.

*Duration: 0 hr 50 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

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## **LESSON 8: SOLVING EQUATIONS WRAP-UP**

### **Test (CS): Solving Equations**

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

*Duration: 1 hr*

*Scoring: 75 points*

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## LESSON 9: DIAGNOSTIC

### Diagnostic: Solving Equations

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 36 points*

## UNIT 5: SOLVING INEQUALITIES

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### LESSON 1: SOLVING INEQUALITIES

#### Study: Solving Inequalities

Develop strategies to solve various forms of inequalities and display their solution set on a number line.

*Duration: 0 hr 30 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

#### Quiz: Solving Inequalities

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 8 points*

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### LESSON 2: INEQUALITIES

#### Study: Inequalities

Learn about solving inequalities by dividing by the coefficient of a variable. Learn about multiplying and dividing inequalities by negative numbers.

*Duration: 0 hr 30 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

#### Quiz: Inequalities

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 10 points*

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### LESSON 3: PROBLEM SOLVING

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**Study: Problem Solving**

Learn strategies for solving a variety of application problems related to topics in this unit.

*Duration: 0 hr 30 min*

**Practice: Assignment**

Submit your work for a set of problem-solving applications.

*Duration: 0 hr 30 min Scoring: 30 points*

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**LESSON 4: MULTISTEP AND COMPOUND INEQUALITIES****Study: Multistep and Compound Inequalities**

Apply the techniques you have learned so far in this unit to solve multistep and compound inequalities.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

**Quiz: Multistep and Compound Inequalities**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring: 12 points*

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**LESSON 5: SOLVING INEQUALITIES WRAP-UP****Test (CS): Solving Inequalities**

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

*Duration: 1 hr Scoring: 75 points*

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**LESSON 6: DIAGNOSTIC****Diagnostic: Solving Inequalities**

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 27 points*

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**UNIT 6: APPLICATIONS OF MEASUREMENT**

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## LESSON 1: ESTIMATION AND SCALE

### Study: Estimation and Scale

Learn about scale of numbers, order of magnitude, powers of 10, estimating large numbers, and Fermi problems.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Estimation and Scale

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30*

*points*

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## LESSON 2: UNITS AND REASONABLE VALUES

### Study: Units and Reasonable Values

Learn to recognize units of measure and determine reasonable values.

*Duration:*

*0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Units and Reasonable Values

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

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## LESSON 3: APPLICATIONS OF MEASUREMENT

### Study: Applications of Measurement

Learn about applications of units, unit conversions, estimation and scale, order of magnitude, precision, accuracy, and significant figures.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

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### **Quiz: Applications of Measurement**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

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## **LESSON 4: PRECISION IN MEASUREMENT**

### **Study: Precision in Measurement**

Learn about precision, accuracy, significant figures, multiplication, and addition.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Precision and Accuracy**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*30 points*

### **Quiz: Significant Figures**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30*

*points*

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## **LESSON 5: MEASUREMENT CONVERSIONS**

### **Study: Measurement Conversions**

Use conversions between measurement systems to solve problems in real-world situations.

*Duration: 0 hr 50 min Scoring: 0 points*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

*Scoring: 0 points*

### **Quiz: Measurement Conversions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 20 points*

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## LESSON 6: APPLICATIONS OF MEASUREMENT WRAP-UP

### Test (CS): Applications of Measurement

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

*Duration: 1 hr Scoring: 75 points*

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## LESSON 7: DIAGNOSTIC

### Diagnostic: Applications of Measurement

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 36 points*

## UNIT 7: FUNCTIONS

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### LESSON 1: WHEN ONE THING DEPENDS ON ANOTHER

#### Study: When One Thing Depends on Another

Learn the definition and explore examples of functions as quantities that depend on other quantities.

*Duration: 0 hr 40 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

#### Quiz: When One Thing Depends on Another

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*15 min Scoring: 12 points*

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### LESSON 2: FUNCTION NOTATION

#### Study: Function Notation

Learn about and explore examples of function notation.

*Duration: 0 hr 40 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

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*Duration: 0 hr 20 min*

### **Quiz: Translating to Function Notation**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min*

*Scoring: 12 points*

### **Quiz: Function Notation for Specific Amounts**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*15 min Scoring: 12 points*

### **Quiz: Naming Functions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring: 12*

*points*

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## **LESSON 3: INPUT-OUTPUT MACHINES**

### **Study: Input-Output Machines**

Learn about the domain and range of functions, input-output diagrams, using rules for functions, and mathematical expressions in functions.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### **Quiz: Using Functions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring: 12*

*points*

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## **LESSON 4: HOW MANY OUTPUTS?**

### **Study: How Many Outputs?**

Review functions and what makes them special; independent and dependent variables; inputs and outputs; and examples of relationships that might not be functional.

*Duration: 0 hr 40 min*

### **Quiz: How Many Outputs?**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring: 12*

*points*

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## LESSON 5: FUNCTIONS AND RELATIONS

### Study: Functions and Relations

Learn about using mapping diagrams; ordered pairs on diagrams; the difference between mapping diagrams of functions and relations; the vertical-line test; and equations of functions and relations.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Mapping Functions and Relations

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15*

*min Scoring: 12 points*

### Quiz: Identifying Functions and Relations

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15*

*min Scoring: 12 points*

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## LESSON 6: DOMAIN AND RANGE

### Study: Domain and Range

Learn about domain and range on a mapping diagram, estimating domain and range of functions, and calculating the domain of a function from an equation.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Domain and Range

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring: 12*

*points*

---

## LESSON 7: FUNCTIONS WRAP-UP

### Test (CS): Functions

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

*Duration: 1 hr Scoring:*

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## LESSON 8: DIAGNOSTIC

### Diagnostic: Functions

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0*

*hr 25 min Scoring: 34 points*

## UNIT 8: SOLVING FUNCTIONS AND SEQUENCES

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### LESSON 1: FUNCTIONS AND TABLES

#### Study: Functions and Tables

Learn about using input-output tables to define or describe functions, estimating values of functions, and finding a function's rule on a table.

*Duration: 0 hr 40 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

#### Quiz: Functions and Tables

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring: 12*

*points*

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### LESSON 2: FUNCTIONS AND GRAPHS

#### Study: Functions and Graphs

Learn about using bar graphs, pie charts, and line graphs to describe or define functions.

*Duration: 0 hr 40 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

#### Quiz: Functions and Graphs

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring:*

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12 points

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## LESSON 3: FUNCTIONS AND FORMULAS

### Study: Functions and Formulas

Learn about using algebraic rules and formulas to describe and define functions.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 20 min*

### Quiz: Functions and Formulas

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 15 min Scoring:*

*12 points*

### Study: Solving the Profit Problem

In a real-world application, use tables, rules, and the method of estimating values to write an equation that expresses a function. Solve the equation and express the output in a line graph.

*Duration: 0 hr 40*

*min*

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## LESSON 4: FINDING PATTERNS

### Study: Finding Patterns

Learn about image, letter, and number patterns and about finding the next term.

*Duration: 0 hr*

*40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

### Quiz: Finding Patterns

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 28*

*points*

### Quiz: Letter and Number Patterns

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 24 points*

---



## LESSON 5: ARITHMETIC SEQUENCES

### Study: Arithmetic Sequences

Learn about arithmetic sequences, common difference, explicit and recursive formulas, and finding the next term in a sequence.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

### Quiz: Arithmetic Sequences

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*24 points*

### Quiz: Rules For Arithmetic Sequences

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 28 points*

---

## LESSON 6: ARITHMETIC OF FUNCTIONS

### Study: Mixing and Matching

Learn how to add, subtract, multiply, divide, and compose functions.

*Duration: 0 hr 50 min*

### Checkup: Lessons Learned

Complete a set of practice problems on the arithmetic of functions.

*Duration: 0 hr 50 min*

### Quiz: Arithmetic of Functions

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 40 min Scoring:*

*20 points*

---

## LESSON 7: SOLVING FUNCTIONS AND SEQUENCES WRAP-UP

### Test (CS): Solving Functions and Sequences

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

*Duration: 1 hr Scoring: 75 points*

---

## LESSON 8: DIAGNOSTIC

### Diagnostic: Solving Functions and Sequences

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 31 points*

## UNIT 9: FLORIDA MATH FOR COLLEGE READINESS SEMESTER I EXAM

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### LESSON 1: FLORIDA MATH FOR COLLEGE READINESS SEMESTER I

#### Exam: Florida Math for College Readiness Semester I

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

*Duration: 1 hr 20 min Scoring: 200 points*

## UNIT 10: LINEAR EQUATIONS

---

### LESSON 1: DATA ANALYSIS

#### Study: Data Analysis

Learn about using the Cartesian coordinate system to find patterns in data; plotting points on a graph; dependent and independent variables; converting table data to ordered pairs; and using the best-fit line to estimate the value of data points.

*Duration: 0 hr 50 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

#### Quiz: Data Analysis

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 18 points*

---

### LESSON 2: PATTERNS AND LINES

#### Study: Patterns and Lines

Explore a variety of functional relationships involving direct variation. Get an introduction to lines by examining the connection between the pattern of points on the graph of a line and the line's equation. Find the

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equation of a line based on the coordinates of its points, and graph a linear equation from a chart of its solutions.

*Duration:*

*0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Finding Equations of Lines as Solutions**

Take a quiz to assess your understanding of the material.

*Duration: 0*

*hr 25 min Scoring: 30 points*

---

**LESSON 3: LINES IN THE XY-PLANE**

**Study: Lines in the *xy*-plane**

Learn about plotting solution set values of equations as data points on the *xy*-plane (the graph of the equation).

*Duration: 0 hr 50 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Lines in the *xy*-plane**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 22*

*points*

---

**LESSON 4: SLOPE**

**Study: Slope**

Learn about measuring slope, rise, and run; the slope formula; negative zero and undefined slope; and measuring the rate of change of a dependent variable.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

**Quiz: Computing Slope**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 24*

*points*

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### **Quiz: Special Cases of Slope**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*30 points*

---

## **LESSON 5: MIDPOINT FORMULA**

### **Study: Midpoint Formula**

Learn about the midpoints of horizontal, vertical, and diagonal line segments and about the midpoint formula. Complete a sample problem.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

### **Quiz: Midpoint Formula**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30*

*points*

---

## **LESSON 6: THE DISTANCE FORMULA**

### **Study: The Distance Formula**

Derive the distance formula from the Pythagorean theorem. Use this formula to calculate the distance between any two points. Apply the distance formula in a real-world problem that involves locating the shortest route on a nautical map.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

### **Quiz: The Distance Formula**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*20 points*

---

## **LESSON 7: PROPERTIES OF LINES**

### **Study: Properties of Lines**

Derive information about lines in their various forms.

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*Core > Florida Math for College Readiness*

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*Duration: 0 hr 40 min*

### **Practice: Properties of Lines**

Submit your work for a set of 20 practice problems.

*Duration: 0 hr 30 min Scoring: 25 points*

---

## **LESSON 8: SLOPE-INTERCEPT EQUATION OF A LINE**

### **Study: Slope-Intercept Equation of a Line**

Learn about using slope and  $y$ -intercept to find the slope-intercept equation of a line.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Finding Slope-Intercept Equations of Lines**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 22 points*

---

## **LESSON 9: POINT-SLOPE EQUATION OF A LINE**

### **Study: Point-Slope Equation of a Line**

Learn about using slope and a point to find the  $y$ -intercept of a line; deriving and using the point-slope equation; and the standard form of an equation. Complete an application problem involving a mass on a spring.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Finding the Point-Slope Equation**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30 points*

### **Quiz: Finding the Equations of Lines**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 22 points*

---

## LESSON 10: LINEAR INEQUALITIES

### Study: Linear Inequalities

Learn about finding and graphing solutions sets for linear inequalities.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Graphs of Inequalities

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*18 points*

### Study: Solving the Lighting Problem

Learn about applying linear inequalities in order to solve the real-world problem of energy usage, comparing incandescent and fluorescent light bulbs.

*Duration: 0 hr 40 min*

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## LESSON 11: PARALLEL AND PERPENDICULAR LINES

### Study: Parallel and Perpendicular Lines

Learn about parallel and perpendicular lines and the relationships between their slopes.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Slopes of Parallel and Perpendicular Lines

Take a quiz to assess your understanding of the material.

*Duration:*

*0 hr 25 min Scoring: 30 points*

---

## LESSON 12: LINEAR EQUATIONS WRAP-UP

### Test (CS): Linear Equations

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

*Duration: 1 hr*

*Scoring: 75 points*

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## LESSON 13: DIAGNOSTIC

### Diagnostic: Linear Equations

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 30 points*

## UNIT 11: MANIPULATING FUNCTIONS

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### LESSON 1: GRAPHING AND MANIPULATING $Y = MX + B$

#### Study: Graphing and Manipulating $y = mx + b$

Learn, describe, and predict how changing the values of  $m$  and  $b$  in the slope-intercept equation of a line changes the graph of the equation.

*Duration: 0 hr 40 min Scoring: 0 points*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

*Scoring: 0 points*

#### Quiz: Graphing and Manipulating $y = mx + b$

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*25 min Scoring: 20 points*

---

### LESSON 2: SHIFTING FUNCTIONS

#### Study: Shifting Functions

Learn about shifting graphs of functions up/down and left/right by changing the coordinates of each ordered pair. Learn about changing the equation of a function to shift its graph vertically or horizontally and about combining vertical and horizontal shifts.

*Duration: 0 hr 50 min*

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

#### Quiz: Shifting Functions Vertically

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 18 points*

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### Quiz: Shifting Functions Horizontally

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

### Quiz: Shifting Functions Vertically and Horizontally

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 18 points*

---

## LESSON 3: STRETCHING FUNCTIONS VERTICALLY

### Study: Stretching Functions Vertically

Learn about vertically stretching or compressing a function's graph by multiplying by a constant; flipping the graph by multiplying by a negative constant; and combining vertical stretches with vertical or horizontal shifts.

*Duration: 0 hr 50 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Stretching Functions Vertically

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 20 points*

### Study: Solving the Ball-Tossing Problem

Learn about shifting and stretching graphs and using inverses and about how to apply these methods to the real-world problem of tossing a ball. Learn about using average velocity as an estimate of instantaneous velocity.

*Duration: 0 hr 50 min*

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## LESSON 4: TRANSFORMATIONS OF PARENT FUNCTIONS

### Study: Transformations of Parent Functions

Learn how to perform vertical shifts, horizontal shifts, vertical stretches and compressions, horizontal stretches and compressions, and any combination of these transformations on parent functions.

*Duration: 0 hr 50 min Scoring: 0 points*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

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Scoring: 0 points

### Quiz: Transformations of Parent Functions

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25

min Scoring: 30 points

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## LESSON 5: MANIPULATING FUNCTIONS WRAP-UP

### Test (CS): Manipulating Functions

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

Duration:

1 hr Scoring: 75 points

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## LESSON 6: DIAGNOSTIC

### Diagnostic: Manipulating Functions

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hr 20 min Scoring: 22 points

## UNIT 12: SYSTEMS OF EQUATIONS

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### LESSON 1: FORMULATING SYSTEMS OF EQUATIONS

#### Study: Formulating Systems of Equations

Learn how to formulate mathematical equations from word problems that are described by a system of two equations or inequalities.

Duration: 0 hr 40 min Scoring: 0 points

#### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

Duration: 0 hr 30 min

Scoring: 0 points

#### Quiz: Formulating Systems of Equations

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25

min Scoring: 20 points

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## LESSON 2: TWO-VARIABLE SYSTEMS: GRAPHING

### Study: Two-Variable Systems: Graphing

Learn about graphing systems of two linear equations and investigating when and why systems of linear equations have no solutions, exactly one solution, or infinitely many solutions.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Solving with Graphing

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30 points*

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## LESSON 3: TWO-VARIABLE SYSTEMS: SUBSTITUTION

### Study: Two-Variable Systems: Substitution

Learn about replacing a variable with an equal value or expression in order to transform a two-variable equation into a one-variable equation. Learn about using the substitution method to solve systems of linear equations and about applying this method to the real-world problem of a rabbit catching a turtle.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Solving with Substitution

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30 points*

---

## LESSON 4: TWO-VARIABLE SYSTEMS: ELIMINATION

### Study: Two-Variable Systems: Elimination

Strategize methods for eliminating a variable term when solving a system of linear equations. Practice adding or subtracting the same value from both sides of an equation in order to eliminate strategic terms. Change equations from nonstandard form to standard form so that they are easier to work with and adapt to the elimination method.

*Duration: 0 hr 40 min*

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**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Solving with Elimination Standard Form**

Take a quiz to assess your understanding of the material.

*Duration: 0*

*hr 25 min Scoring: 30 points*

**Quiz: Solving with Elimination Non-Standard Form**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 26 points*

---

**LESSON 5: SYSTEMS OF EQUATIONS WRAP-UP****Test (CS): Systems of Equations**

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

*Duration: 1*

*hr Scoring: 75 points*

---

**LESSON 6: DIAGNOSTIC****Diagnostic: Systems of Equations**

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 25 min Scoring: 26 points*

**UNIT 13: POLYNOMIALS**

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**LESSON 1: WHAT IS A POLYNOMIAL?****Study: What is a Polynomial?**

Learn the definitions of monomials, polynomials, constants, terms, coefficients, binomials, trinomials, and degree. Learn about finding degrees of polynomials.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

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**Quiz: Degrees of Polynomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*30 points*

**Quiz: Degrees of Polynomials (Advanced)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 30 points*

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**LESSON 2: ADDING AND SUBTRACTING POLYNOMIALS****Study: Adding and Subtracting Polynomials**

Learn about using tiles to represent, add, and subtract polynomials and about adding and subtracting polynomials by collecting like terms. Apply these methods to the real-world problem of purchasing streetlamps.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Polynomial Addition with Tiles**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

**Quiz: Polynomial Addition**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 28*

*points*

**Quiz: Polynomial Subtraction**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*16 points*

---

**LESSON 3: MULTIPLYING BINOMIALS****Study: Multiplying Binomials**

Learn about using tiles to multiply linear binomials; using the distributive property to simplify and find the product of two binomials; and the FOIL (first, outer, inner, last) method of finding products.

*Duration: 0 hr 40*

*min*

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**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Finding Products of Binomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 28 points*

**Quiz: Finding the Product of Two Binomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*25 min Scoring: 30 points*

**Quiz: The FOIL Method**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

---

**LESSON 4: MULTIPLYING POLYNOMIALS****Study: Multiplying Polynomials**

Learn about using a table to multiply polynomials; using the distributive property; and multiplying polynomials by arranging them vertically.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Polynomial Multiplication**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 22 points*

**Quiz: Polynomial Multiplication (Advanced)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*25 min Scoring: 28 points*

---

**LESSON 5: GRAPHING POLYNOMIALS****Study: Graphing Polynomials**

Learn about graphs as pictures of solution sets. Use a table to find and graph solutions to

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polynomial equations. Explore why these graphs are always continuous curves. Graph higher-degree polynomial equations by plotting their corresponding points and identifying their parts, such as extreme values (maximum and minimum) and roots.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Finding Extreme Values**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*24 points*

### **Quiz: Finding Roots of Graphs**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*22 points*

### **Study: The Stereo Problem**

Apply the method of graphing polynomials in order to solve the real-world problem of finding the relationship between the price of stereos and sales figures.

*Duration: 0 hr 40 min*

---

## **LESSON 6: POLYNOMIALS WRAP-UP**

### **Test (CS): Polynomials**

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

*Duration: 1 hr*

*Scoring: 75 points*

---

## **LESSON 7: DIAGNOSTIC**

### **Diagnostic: Polynomials**

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration:*

*0 hr 25 min Scoring: 29 points*

## **UNIT 14: FACTORING QUADRATIC EXPRESSION**

---

### **LESSON 1: FACTORING AND GRAPHING**

**Study: Factoring and Graphing**

Learn about the connection between roots and linear factors; using roots on graphs of polynomials to find linear factors; and polynomials with no linear factors or repeated linear factors.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Factoring by Graphing**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*28 points*

**Quiz: Factoring by Graphing (Advanced)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 22 points*

---

**LESSON 2: GROUPING****Study: Grouping**

Learn about polynomials with terms that have a common factor; applying the distributive property in reverse to factor out common factors; and finding the greatest common factor.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Factoring by Grouping**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*30 points*

**Quiz: Finding GCFs of Polynomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

---

**LESSON 3: FACTORING  $X^2 + BX + C$** **Study: Factoring  $x^2 + bx + c$** 

Learn about factoring quadratic trinomials with leading coefficients of 1; rules for

finding the constant term and coefficient of the x-term; using a table to factor trinomials; and diagramming signs while factoring trinomials.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Binomial Factors of Trinomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

**Quiz: Factoring Trinomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30*

*points*

---

**LESSON 4: FACTORING  $AX^2 + BX + C$**

**Study: Factoring  $ax^2 + bx + c$**

Learn about factoring trinomials with leading coefficients other than 1; factoring out a leading coefficient of -1; how values of factors relate to values of a trinomial; finding factor pairs of leading coefficients and constant terms; and finding signs in factors of trinomials with a leading coefficient different from 1.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Factoring Trinomials (Basic)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

**Quiz: Factoring Trinomials (Advanced)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

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**LESSON 5: SPECIAL CASES**

**Study: Special Cases**

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Learn about recognizing and factoring a difference of squares; perfect-square trinomials; sums; and differences of two cubes.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Factoring a Difference of Squares**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 30 points*

**Quiz: Factoring Perfect Square Trinomials**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 20 points*

**Quiz: Sum or Difference of Two Cubes**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

---

## LESSON 6: SOLVING WITH ROOTS AND POWERS

**Study: Solving with Roots and Powers**

Review solving equations with square roots and absolute values. Review solving inequalities with square roots and absolute values, including by using a number line.

*Duration: 0 hr 50 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

**Quiz: Solving with Roots and Powers**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

**Quiz: Solving Inequalities with Roots and Powers**

Take a quiz to assess your understanding of the material.

*Duration:*

*0 hr 25 min Scoring: 16 points*

**Quiz: Finding Solution Sets with Inequalities**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

## LESSON 7: SOLVING QUADRATIC EQUATIONS

### Study: Solving Quadratic Equations

Learn about solving quadratic equations using factoring and the zero product rule; manipulating a quadratic equation into standard form; and solving quadratic equations with perfect-square trinomials.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Factoring with the Zero Product Rule

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 28 points*

### Quiz: Converting Quadratics to Standard Form

Take a quiz to assess your understanding of the material.

*Duration: 0*

*hr 25 min Scoring: 28 points*

### Quiz: Quadratics with Perfect Square Trinomials

Take a quiz to assess your understanding of the material.

*Duration: 0*

*hr 25 min Scoring: 16 points*

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## LESSON 8: COMPLETING THE SQUARE

### Study: Completing the Square

Learn about solving quadratic equations without perfect-square trinomials; completing the square using tiles; and completing the square when the coefficients are more complicated.

*Duration: 0 hr 40 min*

### Checkup: Practice Problems

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### Quiz: Completing the Square

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring:*

*24 points*

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### **Quiz: Completing the Square (Advanced)**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25*

*min Scoring: 24 points*

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## **LESSON 9: THE QUADRATIC FORMULA**

### **Study: The Quadratic Formula**

Learn about types of equations that can be solved using the quadratic formula; complex numbers; discriminants; and finding roots (including complex roots) using the quadratic formula.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Complex Numbers and Discriminants**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr*

*25 min Scoring: 30 points*

### **Quiz: The Quadratic Formula**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 30 min Scoring:*

*30 points*

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## **LESSON 10: GRAPHS OF QUADRATIC FUNCTIONS**

### **Study: Graphs of Quadratic Functions**

Relate factors of a quadratic function to the graph of a parabola and its corresponding x-intercepts. Locate the vertex of a quadratic function graphically and algebraically. Use the discriminant of the quadratic formula to identify the number and types of solutions to a given quadratic equation, as well as to visualize its corresponding graph.

*Duration: 0 hr 50 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

### **Quiz: Graphs of Quadratic Functions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 30 points*

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### **Quiz: Working with the Discriminant**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 20 points*

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## **LESSON 11: FACTORING QUADRATIC EXPRESSION WRAP-UP**

### **Test (CS): Factoring Quadratic Expression**

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

*Duration: 1 hr Scoring: 75 points*

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## **LESSON 12: DIAGNOSTIC**

### **Diagnostic: Factoring Quadratic Expression**

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration: 0 hr 35 min Scoring: 35 points*

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## **UNIT 15: RATIONAL EXPRESSIONS**

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### **LESSON 1: RATIONAL EXPRESSIONS**

#### **Study: Rational Expressions**

Learn about finding the value of a rational expression and about undefined rational expressions.

*Duration: 0 hr 40 min*

#### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

#### **Quiz: Rational Expressions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 16*

*points*

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### **LESSON 2: SIMPLIFYING RATIONAL EXPRESSIONS**

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### **Study: Simplifying Rational Expressions**

Practice finding and dividing out common factors in numerators and denominators of rational expressions. Explore the crucial difference between common factors and terms.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

### **Quiz: Simplifying Rational Expressions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 16 points*

---

## **LESSON 3: MULTIPLYING AND DIVIDING RATIONAL EXPRESSIONS**

### **Study: Multiplying and Dividing Rational Expressions**

Review multiplying and dividing numerical fractions, multiplying rational expressions, dividing rational expressions, and simplifying the results.

*Duration: 0 hr 40 min*

### **Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

### **Quiz: Multiplying Rational Expressions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 18 points*

### **Quiz: Dividing Rational Expressions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min*

*Scoring: 18 points*

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## **LESSON 4: ADDING AND SUBTRACTING RATIONAL EXPRESSIONS**

### **Study: Adding and Subtracting Rational Expressions**

Review adding and subtracting numerical fractions; adding and subtracting rational expressions with like denominators; finding least common denominators; multiples of rational expressions; and adding and subtracting rational expressions with unlike denominators.

*Duration: 0 hr 40 min*

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**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

**Quiz: Adding and Subtracting Rational Expressions**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 22 points*

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**LESSON 5: RATIONAL EQUATIONS****Study: Rational Equations**

Learn how to solve simple rational equations.

*Duration: 0 hr 50 min Scoring: 0 points*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 30 min*

*Scoring: 0 points*

**Quiz: Rational Equations**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 20 points*

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**LESSON 6: SOLVING RADICAL EQUATIONS****Study: Solving Radical Equations**

Learn how to solve equations with radical expressions by isolating the radical and squaring both sides.

*Duration: 0 hr 40 min*

**Checkup: Practice Problems**

Complete a set of practice problems to hone your calculation skills.

*Duration: 0 hr 25 min*

**Quiz: Solving Radical Equations**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 25 min Scoring: 30 points*

**Study: Applications of Radical Equations**

Explore case studies in order to practice methods of solving radical equations in applied settings.

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Duration: 0 hr 40 min

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## LESSON 7: RATIONAL EXPRESSIONS WRAP-UP

### Test (CS): Rational Expressions

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

Duration: 1

hr Scoring: 75 points

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## LESSON 8: DIAGNOSTIC

### Diagnostic: Rational Expressions

Take a diagnostic unit test that will generate a study plan based on your responses.

Duration: 0 hr 25 min Scoring: 25 points

## UNIT 16: DATA ANALYSIS

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### LESSON 1: CATEGORICAL DATA

#### Study: Categorical Data

Learn how to construct and interpret bar charts, pie graphs, and comparative bar charts.

Duration: 0 hr 40 min Scoring: 0 points

#### Checkup: Practice Problems

Complete a set of practice problems to check your understanding of the lesson.

Duration:

0 hr 25 min Scoring: 0 points

#### Quiz: Categorical Data

Take a quiz to assess your understanding of the material.

Duration: 0 hr 20 min Scoring: 20  
points

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### LESSON 2: MEASURES OF CENTER

#### Study: Measures of Center

Learn how to calculate and interpret measures of center, such as mean, median, and mode.

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*Duration: 0 hr 40 min Scoring: 0 points*

**Checkpoint: Practice Problems**

Complete a set of practice problems to check your understanding of the lesson.

*Duration:*

*0 hr 25 min Scoring: 0 points*

**Quiz: Measures of Center**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 20*

*points*

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**LESSON 3: BOX PLOTS**

**Study: Box Plots**

Learn how to calculate and interpret box plots, comparative box plots, and modified box plots.

*Duration: 0 hr 40 min Scoring: 0 points*

**Checkpoint: Practice Problems**

Complete a set of practice problems to check your understanding of the lesson.

*Duration:*

*0 hr 25 min Scoring: 0 points*

**Quiz: Box Plots**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 20 points*

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**LESSON 4: SCATTERPLOTS**

**Study: Scatterplots**

Learn how to construct and interpret scatterplots.

*Duration: 0 hr 40 min Scoring: 0 points*

**Checkpoint: Practice Problems**

Complete a set of practice problems to check your understanding of the lesson.

*Duration:*

*0 hr 25 min Scoring: 0 points*

**Quiz: Scatterplots**

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 20 points*

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## LESSON 5: CORRELATION COEFFICIENTS

### Study: Correlation Coefficients

Learn how to calculate and interpret Pearson's sample correlation coefficient.

*Duration:*

*0 hr 40 min Scoring: 0 points*

### Checkup: Practice Problems

Complete a set of practice problems to check your understanding of the lesson.

*Duration:*

*0 hr 25 min Scoring: 0 points*

### Quiz: Correlation Coefficients

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring:*

*20 points*

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## LESSON 6: LINEAR REGRESSION

### Study: Linear Regression

Learn how to calculate a linear regression equation, interpret the slope and intercept in context, and identify influential points (compared to large residuals).

*Duration: 0 hr 40 min Scoring: 0 points*

### Checkup: Practice Problems

Complete a set of practice problems to check your understanding of the lesson.

*Duration:*

*0 hr 25 min Scoring: 0 points*

### Quiz: Linear Regression

Take a quiz to assess your understanding of the material.

*Duration: 0 hr 20 min Scoring: 20*

*points*

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## LESSON 7: DATA ANALYSIS WRAP-UP

### Test (CS): Data Analysis

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

*Duration: 1 hr*

*Scoring: 75 points*

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## LESSON 8: DIAGNOSTIC

### **Diagnostic: Data Analysis**

Take a diagnostic unit test that will generate a study plan based on your responses.

*Duration:*

*0 hr 30 min Scoring: 30 points*

## UNIT 17: FLORIDA MATH FOR COLLEGE READINESS SEMESTER II EXAM

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### LESSON 1: FLORIDA MATH FOR COLLEGE READINESS SEMESTER II

#### **Exam: Florida Math for College Readiness Semester II**

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

*Duration: 1 hr 20 min Scoring: 200 points*