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

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

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

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

LESSON 3: SUBTRACTING INTEGERS

Study: Subtracting Integers
Learn about subtracting negative integers by using a number line and by adding the opposite number
Checkup: Practice Problems
Complete a set of practice problems to hone your calculation skills.
Duration: 0 hr 40 min

Quiz: Subtracting Integers
Take a quiz to assess your understanding of the material.
Duration: 0 hr 20 min

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

LESSON 5: DIVIDING INTEGERS

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

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
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

LESSON 8: DIAGNOSTIC

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

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

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

Quiz: Multiplying Fractions
Take a quiz to assess your understanding of the material.
Duration: 0 hr 25 min Scoring: 20 points

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

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
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

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*

**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*

**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*
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

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

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

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

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

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

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

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.
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

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

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 min Scoring: 10 points

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

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

LESSON 8: DIAGNOSTIC

Diagnostic: Exponents
UNIT 4: SOLVING EQUATIONS

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.

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: 22 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

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

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

Duration: 0 hr 25 min  Scoring: 20 points

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
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.
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

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

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

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

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

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

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

LESSON 3: PROBLEM SOLVING

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

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

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

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

UNIT 6: APPLICATIONS OF MEASUREMENT

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

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

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

**Quiz: Applications of Measurement**
Take a quiz to assess your understanding of the material.

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

**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

**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

**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

**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**
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*

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.
*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*

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*

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

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

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: 75 points

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

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.
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

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: 12 points

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

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**

**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 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

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Quiz: Computing Slope
Take a quiz to assess your understanding of the material.
Duration: 0 hr 25 min Scoring: 24 points

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.
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.
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

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

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

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

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

**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 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

**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

**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**

**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

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

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

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**

**LESSON 1: WHAT IS A POLYNOMIAL?**

Study: What is a Polynomial?
Learn the definitions of monomials, polynomials, constants, terms, coefficients, binomials, trinomials, and degree.
*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: 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*

**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.

**Checkup: Practice Problems**
Complete a set of practice problems to hone your calculation skills.

**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.

**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 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.

**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

LESSON 5: SPECIAL CASES

Study: Special Cases
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
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 25 min Scoring: 16 points

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
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

Quiz: Completing the Square (Advanced)
Take a quiz to assess your understanding of the material.
Duration: 0 hr 25 min Scoring: 24 points

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

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

Quiz: Working with the Discriminant
Take a quiz to assess your understanding of the material.
Duration: 0 hr 25 min Scoring: 20 points
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*

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*

UNIT 15: RATIONAL EXPRESSIONS

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*

LESSON 2: SIMPLIFYING RATIONAL EXPRESSIONS

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

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

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

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

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.
Duration: 0 hr 40 min

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
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

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*

LESSON 2: MEASURES OF CENTER

Study: Measures of Center
Learn how to calculate and interpret measures of center, such as mean, median, and mode.
*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: Measures of Center
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 20 min Scoring: 20 points*

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*

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: Box Plots
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 20 min Scoring: 20 points*

LESSON 4: SCATTERPLOTS

Study: Scatterplots
Learn how to construct and interpret scatterplots.
*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: Scatterplots**
Take a quiz to assess your understanding of the material.
*Duration: 0 hr 20 min Scoring: 20 points*

**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*

**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*

**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*

**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**

**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*