

Integrated Math I provides a first-year math curriculum that combines material traditionally covered in high school algebra, geometry, and statistics courses. Integrated Math I is uniquely organized around thematic learning tasks that integrate concepts from the various strands of math. Within the course, a balance is struck between task-based discovery and focused development of skills and conceptual understanding.

Course topics include function families, propositional logic, polynomials and factoring, similarity and congruence properties of triangles, introductory probability and statistics, square roots, rational expressions, and coordinate geometry.

Carefully paced, guided instruction is accompanied by interactive practice that is engaging and accessible. Interactive tasks allow students to approach and explore topics through real-world situations, helping them to gain an intuitive understanding while learning at the appropriate depth and rigor of a standards-based curriculum. Formative assessments help students to understand areas of weakness and improve performance, while summative assessments chart progress and skill development. Throughout the course, students develop general strategies for honing their problem-solving skills.

The content is based on the National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics, as well as the Georgia Performance Standards and Instructional Frameworks in Mathematics. Detailed correlations to state-specific standards are available upon request.

Length: Two Semesters

UNIT 1: FUNCTION FAMILIES

LESSON 1: FUNCTION NOTATION

Study: Function Notation

Review the concepts of domain, range, and independent and dependent variables. Learn about function notation, and work with tables and dot plots to discover the difference between a relation and a function.

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: Function Notation

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 2: EQUALITY OF FUNCTIONS

Study: Equality of Functions

Learn the difference between discrete and continuous domains and use this distinction to discover what it means for two functions to be equal.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Equality of Functions

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 3: GRAPHS OF FUNCTIONS: x^N

Study: Graphs of Functions: x^n

Learn the definition of the graph of a function and discover the vertical-line test. Explore the examples $f(x) = x$, x^2 , and x^3 .

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Graphs of Functions: x^n

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 4: GRAPHS OF FUNCTIONS: \sqrt{x} AND $1/x$

Study: Graphs of Functions: \sqrt{x} and $1/x$

Learn how to graph the functions \sqrt{x} and $1/x$. Discuss how to limit the domain and range of a function to define new functions.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min
Scoring: 0 points

Quiz: Graphs of Functions: \sqrt{x} and $1/x$

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min
Scoring: 20 points

LESSON 5: RATES OF CHANGE

Study: Rates of Change

Learn about average rate of change by discussing the example of average speed. Discover the difference between constant and variable rates of change.

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: Rates of Change

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 6: SHIFTS OF LINES

Study: Shifts of Lines

Learn about vertical and horizontal shifts of functions in the context of the example $y = f(x) = x$. Discover that shifting a line does not change the slope.

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: Shifts of Lines

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 7: THE EQUATION OF A LINE

Study: The Equation of a Line

Apply the stretch and contract transformations to the line $y = x$ and discover that these are equivalent to changing the slope. Discover the point-slope and slope-intercept equations of a general 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: The Equation of a Line

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 8: ZEROS AND INTERCEPTS OF A FUNCTION**Study: Zeros and Intercepts of a Function**

Define and graphically interpret the zeros and intercepts of a function.

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: Zeros and Intercepts of a Function

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25

min Scoring: 20 points

LESSON 9: INCREASE, DECREASE, MAX AND MIN**Study: Increase, Decrease, Maximum, and Minimum**

Learn how to determine the intervals of increase and decrease of a function. Identify the maximum and minimum of a function, when it exists, using the graph.

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: Increase, Decrease, Maximum, and Minimum

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 10: SEQUENCES AS FUNCTIONS

Study: Sequences as Functions

Explore the definition of a sequence as a function. Learn the difference between a finite and an infinite sequence.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Sequences as Functions

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 11: WORKING WITH SEQUENCES

Study: Working with Sequences

Explore examples of sequences such as Fibonacci and square numbers. Understand recursive definitions of sequences and closed forms.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Working with Sequences

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 12: CONDITIONAL STATEMENTS

Study: Conditional Statements

Explore basic propositional logic of conditional statements.

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: Conditional Statements

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 13: ABSOLUTE VALUE**Study: Absolute Value**

Learn the definition of the absolute-value function. Explore concepts of propositional logic — such as contrapositive, inverse, and converse — by analyzing statements concerning the absolute-value function.

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: Absolute Value

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 14: FUNCTION FAMILIES WRAP-UP**Review: Function Families**

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

Duration: 0 hr 30 min Scoring:

0 points

Practice: Function Families

Submit your work for a set of practice problems.

Duration: 0 hr 50 min Scoring: 60 points

Discuss: Group Discussion

Discuss ideas from this unit that are still unclear. Inform others of strategies you developed during this unit.

Duration: 0 hr 30 min Scoring: 40 points

Test (CS): Function Families

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

Duration: 0 hr

50 min Scoring: 90 points

Test (TS): Function Families

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

Duration: 0 hr 50

min Scoring: 90 points

LESSON 15: DIAGNOSTIC

Diagnostic: Function Families

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

Duration: 0 hr 50 min Scoring: 30 points

UNIT 2: ALGEBRA INVESTIGATIONS

LESSON 1: INTRODUCTION TO POLYNOMIALS

Study: Introduction to Polynomials

Learn the definition of a polynomial and what it means for two polynomials to be equal.

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: Introduction to Polynomials

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 2: ALGEBRA OF POLYNOMIALS

Study: Algebra of Polynomials

Discover how to add, subtract, and multiply polynomials while using the commutative, distributive, and associative properties.

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: Algebra of Polynomials

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 3: BINOMIAL EXPANSION**Study: Binomial Expansion**

Learn the binomial theorem up to $n = 3$ and learn how to use binomial coefficients.

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: Binomial Expansion

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 4: AREA AND VOLUME MODELS**Study: Area and Volume Models**

Use the algebra of polynomials to solve problems relating to area and volume. Discover how identities involving polynomials can be proved using such models.

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: Area and Volume Models

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 5: FACTORING

Study: Factoring

Learn the definition of the greatest common factor and learn how to factor it out of a polynomial. Explore factoring by grouping.

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: Factoring

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 6: COMMON FACTOR FORMULAS

Study: Common Factor Formulas

Use common factoring formulas 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: 0 points

Quiz: Common Factor Formulas

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 7: SOLVING QUADRATIC EQUATIONS

Study: Solving Quadratic Equations

Learn the definition of a quadratic equation. Discover how the square-root function

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can be used to solve quadratics without a linear term. Use factoring to solve more general quadratic 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: Solving Quadratic Equations

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 8: INTERPRETING SOLUTIONS GRAPHICALLY

Study: Interpreting Solutions Graphically

Revisit the concept of a zero and learn the definition of a root of a quadratic.

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: Interpreting Solutions Graphically

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25

min Scoring: 20 points

LESSON 9: ALGEBRA INVESTIGATIONS WRAP-UP

Review: Algebra Investigations

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

Duration: 0 hr 30 min

Scoring: 0 points

Practice: Algebra Investigations

Submit your work for a set of practice problems.

Duration: 0 hr 50 min Scoring: 60

points

Discuss: Group Discussion

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Discuss ideas from this unit that are still unclear. Inform others of strategies you developed during this unit.

Duration: 0 hr 30 min Scoring: 40 points

Test (CS): Algebra Investigations

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

Duration: 0

hr 50 min Scoring: 90 points

Test (TS): Algebra Investigations

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

Duration: 0

hr 50 min Scoring: 90 points

LESSON 10: DIAGNOSTIC

Diagnostic: Algebra Investigations

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

Duration: 0 hr 50 min Scoring: 30 points

UNIT 3: GEOMETRY GALLERY

LESSON 1: POLYGONS: INTERIOR AND EXTERIOR ANGLES

Study: Polygons: Interior and Exterior Angles

Learn the definition of a polygon and prove theorems involving interior and exterior angles.

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: Polygons: Interior and Exterior Angles

Take a quiz to assess your understanding of the material.

Duration: 0 hr

25 min Scoring: 20 points

LESSON 2: REGULAR POLYGONS

Study: Regular Polygons

Explore regular polygons and how the exterior angle–sum theorem reduces in this case.

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: Regular Polygons

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 3: TRIANGLES

Study: Triangles

Explore triangles as a special class of polygons. Discover the triangle inequality and other inequality theorems concerning side length and angle measure.

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: Triangles

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 4: RIGHT TRIANGLES

Study: Right Triangles

Understand right triangles as a special class of triangles. Review the Pythagorean theorem and see how its converse is used as a test for right triangles.

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: Right Triangles

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 5: TRIANGLE CONGRUENCE

Study: Triangle Congruence

Learn the definition of congruence and discover the triangle congruence theorems: SSS, SAS, ASA, and AAS.

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: Triangle Congruence

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 6: RIGHT-TRIANGLE CONGRUENCE

Study: Right-Triangle Congruence

Discover how the congruence theorems simplify for right-triangle congruence.

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: Right-Triangle Congruence

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 7: APPLICATIONS OF CONGRUENCE

Study: Applications of Congruence

Apply the congruence theorems to answer real-world application problems.

Duration: 0 hr 50 min Scoring: 0 points

Checkout: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Applications of Congruence

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 8: TYPES OF TRIANGLES

Study: Types of Triangles

Learn the various terms used to classify triangles by angle measure or side length.

Duration:

0 hr 50 min Scoring: 0 points

Checkout: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Types of Triangles

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 9: BASIC CONSTRUCTIONS

Study: Basic Constructions

Review the terms altitude, median, perpendicular, and angle bisectors, and use various techniques to construct these for a given triangle.

Duration: 0 hr 50 min Scoring: 0 points

Checkout: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Basic Constructions

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

LESSON 10: CENTERS OF TRIANGLES

Study: Centers of Triangles

Learn the definitions of the circumcenter, centroid, orthocenter, and incenter of a triangle.

Duration: 0 hr 50 min Scoring: 0 points

Checkout: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Centers of Triangles

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 11: QUADRILATERALS AND DIAGONALS

Study: Quadrilaterals and Diagonals

Learn how to use diagonals to classify the different types of quadrilaterals.

Duration: 0 hr 50 min Scoring: 0 points

Checkout: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Quadrilaterals and Diagonals

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 12: QUADRILATERALS AND SIDES

Study: Quadrilaterals and Sides

Learn how to use the relationships between diagonals, sides, and angles of quadrilaterals to list the minimum conditions necessary for each type of quadrilateral.

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: Quadrilaterals and Sides

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 13: GEOMETRY GALLERY WRAP-UP

Review: Geometry Gallery

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

Duration: 0 hr 30 min Scoring:

0 points

Practice: Geometry Gallery

Submit your work for a set of practice problems.

Duration: 0 hr 50 min Scoring: 60 points

Discuss: Group Discussion

Discuss ideas from this unit that are still unclear. Inform others of strategies you developed during this unit.

Duration: 0 hr 30 min Scoring: 40 points

Test (CS): Geometry Gallery

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

Duration: 0 hr

50 min Scoring: 90 points

Test (TS): Geometry Gallery

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

Duration: 0 hr 50

min Scoring: 90 points

LESSON 14: DIAGNOSTIC

Diagnostic: Geometry Gallery

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

Duration: 0 hr 50 min Scoring: 30 points

UNIT 4: MATH I SEMESTER 1 REVIEW AND EXAM

LESSON 1: MATH I SEMESTER 1

Review: Math I Semester 1

Prepare for the semester exam by reviewing key concepts covered in Math I semester 1.

Duration: 0 hr 50 min Scoring: 0 points

Exam: Math I Semester 1 (Computer-Scored)

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in Math I Semester 1.

Duration: 0 hr 50 min Scoring: 120 points

Final Exam: Math I Semester 1 (Teacher-Scored)

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in Math I Semester 1.

Duration: 0 hr 50 min Scoring: 120 points

UNIT 5: THE CHANCE OF WINNING

LESSON 1: PROBABILITY

Study: Probability

Learn both the theoretical and empirical definitions of probability. Use sample spaces to compute probabilities.

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: Probability

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 2: INDEPENDENT EVENTS

Study: Independent Events

Explore the difference between independent and dependent events. Use the fundamental

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counting principle to compute probabilities. Learn how to use tree diagrams.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Independent Events

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 3: COMBINATIONS

Study: Combinations

Learn the definitions of a set and a subset. Explore counting situations using combinations where order doesn't matter.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Combinations

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 4: PERMUTATIONS

Study: Permutations

Explore situations where order does matter, and use permutations to count.

Duration: 0 hr 50 min

Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Permutations

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 5: MUTUALLY EXCLUSIVE EVENTS

Study: Mutually Exclusive Events

Use Venn diagrams to learn about mutually exclusive events. Learn how to calculate probabilities of events where the sample spaces do not overlap.

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: Mutually Exclusive Events

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 6: DEPENDENT EVENTS

Study: Dependent Events

Explore the concept of dependent events. Learn the multiplication rule for independent and dependent events.

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: Dependent Events

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 7: CONDITIONAL PROBABILITY

Study: Conditional Probability

Learn the definition of conditional probability. Use Venn diagrams to visualize how to compute conditional probabilities.

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: Conditional Probability

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:
20 points

LESSON 8: MEAN, MEDIAN, AND MODE

Study: Mean, Median, and Mode

Learn how to compute the mean, median, and mode of a data set. Explore situations where one measure of central tendency is more useful than the others.

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: Mean, Median, and Mode

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:
20 points

LESSON 9: QUARTILES

Study: Quartiles

Explore quartiles and box plots.

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: Quartiles

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 10: DISTRIBUTIONS

Study: Distributions

Explore data distributions and learn how to compute the mean deviation.

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: Distributions

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 11: STANDARD DEVIATION AND VARIANCE**Study: Standard Deviation and Variance**

Learn how to compute the standard deviation and variance. Use distributions to interpret these numbers.

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: Standard Deviation and Variance

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 12: PREDICTION AND EXPECTED VALUE**Study: Prediction and Expected Value**

Learn the definition of expected value and use that to predict outcomes.

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: Prediction and Expected Value

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 13: SAMPLES AND POPULATION

Study: Samples and Population

Learn the definitions of a sample and a population. Use proportions to make predictions about a population based on a sample.

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: Samples and Population

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 14: SAMPLING TECHNIQUES

Study: Sampling Techniques

Explore various sampling techniques and learn about bias.

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: Sampling Techniques

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 15: THE CHANCE OF WINNING WRAP-UP

Review: The Chance of Winning

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

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Duration: 0 hr 30 min

Scoring: 0 points

Practice: The Chance of Winning

Submit your work for a set of practice problems.

Duration: 0 hr 50 min Scoring: 60 points

Discuss: Group Discussion

Discuss ideas from this unit that are still unclear. Inform others of strategies you developed during this unit.

Duration: 0 hr 30 min Scoring: 40 points

Test (CS): The Chance of Winning

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

Duration: 0 hr 50 min Scoring: 90 points

Test (TS): The Chance of Winning

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

Duration: 0 hr 50 min Scoring: 90 points

LESSON 16: DIAGNOSTIC

Diagnostic: The Chance of Winning

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

Duration: 0 hr 50 min Scoring: 30 points

UNIT 6: ALGEBRA IN CONTEXT

LESSON 1: SQUARE ROOTS

Study: Square Roots

Learn how to perform algebraic operations with square roots. Find the simplest radical form.

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: Square Roots

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 2: SOLVING WITH SQUARE ROOTS

Study: Solving with Square Roots

Learn how use square roots and algebra to solve 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: Solving with Square Roots

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min

Scoring: 20 points

LESSON 3: DIVIDING POLYNOMIALS

Study: Dividing Polynomials

Learn how to divide polynomials. Practice simplifying quotients of polynomials.

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: Dividing Polynomials

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 4: RATIONAL EXPRESSIONS

Study: Rational Expressions

Learn how to perform algebraic operations with rational expressions. Explore issues

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surrounding the domain of rational functions, including graphical representations.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Rational Expressions

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 5: RATIONAL EQUATIONS

Study: Rational Equations

Learn how to solve simple rational equations.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: 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: SYMMETRY

Study: Symmetry

Explore symmetries of graphs of functions and geometric objects. Learn the definitions of even and odd functions.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min

Scoring: 0 points

Quiz: Symmetry

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 7: TRANSFORMATIONS

Study: Transformations

Learn about general transformations of the graph of a function.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min Scoring: 0 points

Quiz: Transformations

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 8: RESTRICTING DOMAIN AND RANGE

Study: Restricting Domain and Range

Explore the effect of restricting the domain or range of a function.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min Scoring: 0 points

Quiz: Restricting Domain and Range

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 9: CHARACTERISTICS

Study: Characteristics

Explore the concepts of increase, decrease, maximum, and minimum for a larger class of functions.

Duration: 0 hr 50 min Scoring: 0 points

Checkpoint: Practice Problems

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

Duration: 0 hr 30 min
Scoring: 0 points

Quiz: Characteristics

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 10: ALGEBRA IN CONTEXT WRAP-UP

Review: Algebra in Context

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

Duration: 0 hr 30 min

Scoring: 0 points

Practice: Algebra in Context

Submit your work for a set of practice problems.

Duration: 0 hr 50 min Scoring: 60 points

Discuss: Group Discussion

Discuss ideas from this unit that are still unclear. Inform others of strategies you developed during this unit.

Duration: 0 hr 30 min Scoring: 40 points

Test (CS): Algebra in Context

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

Duration: 0 hr

50 min Scoring: 90 points

Test (TS): Algebra in Context

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

Duration: 0 hr 50

min Scoring: 90 points

LESSON 11: DIAGNOSTIC

Diagnostic: Algebra in Context

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

Duration: 0 hr 50 min Scoring: 30 points

UNIT 7: COORDINATE GEOMETRY

LESSON 1: DISTANCE FORMULA

Study: Distance Formula

Explore points and line segments in the coordinate plane and learn how the distance formula is an application of the Pythagorean theorem.

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: Distance Formula

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20

points

LESSON 2: THE MIDPOINT FORMULA

Study: The Midpoint Formula

Learn the midpoint formula of a line segment.

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: The Midpoint Formula

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring:

20 points

LESSON 3: COORDINATE GEOMETRY

Study: Coordinate Geometry

Learn how to compute the distance between a point and a line. Learn how to verify conjectures about parallel and perpendicular lines in the plane.

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: Coordinate Geometry

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min Scoring: 20 points

LESSON 4: PLANAR GEOMETRY: TRIANGLES

Study: Planar Geometry: Triangles

Learn how to describe triangles in the coordinate plane. Use distance, midpoint, and other techniques to verify conjectures concerning triangles in the plane.

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: Planar Geometry: Triangles

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min
Scoring: 20 points

LESSON 5: PLANAR GEOMETRY: QUADRILATERALS

Study: Planar Geometry: Quadrilaterals

Learn how to describe quadrilaterals in the coordinate plane. Use distance, midpoint, and other techniques to verify conjectures concerning quadrilaterals in the plane.

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: Planar Geometry: Quadrilaterals

Take a quiz to assess your understanding of the material.

Duration: 0 hr 25 min
Scoring: 20 points

LESSON 6: COORDINATE GEOMETRY WRAP-UP

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Review: Coordinate Geometry

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

Duration: 0 hr 30 min

Scoring: 0 points

Practice: Coordinate Geometry

Submit your work for a set of practice problems.

Duration: 0 hr 50 min Scoring: 60

points

Discuss: Group Discussion

Discuss ideas from this unit that are still unclear. Inform others of strategies you developed during this unit.

Duration: 0 hr 30 min Scoring: 40 points

Test (CS): Coordinate Geometry

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

Duration: 0

hr 50 min Scoring: 90 points

Test (TS): Coordinate Geometry

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

Duration: 0 hr

50 min Scoring: 90 points

LESSON 7: DIAGNOSTIC**Diagnostic: Coordinate Geometry**

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

Duration: 0 hr 50 min Scoring: 30 points

UNIT 8: MATH I SEMESTER 2 REVIEW AND EXAM

LESSON 1: MATH I SEMESTER 2**Review: Math I Semester 2**

Prepare for the semester exam by reviewing key concepts covered in Math I Semester 2.

Duration: 0 hr 50 min Scoring: 0 points

Exam: Math I Semester 2 (Computer-Scored)

Take a computer-scored exam to demonstrate your mastery of concepts and skills covered in Math I Semester 2.

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Duration: 0 hr 50 min Scoring: 120 points

Final Exam: Math I Semester 2 (Teacher-Scored)

Take a teacher-scored exam to demonstrate your mastery of concepts and skills covered in Math I Semester 2.

Duration: 0 hr 50 min Scoring: 120 points