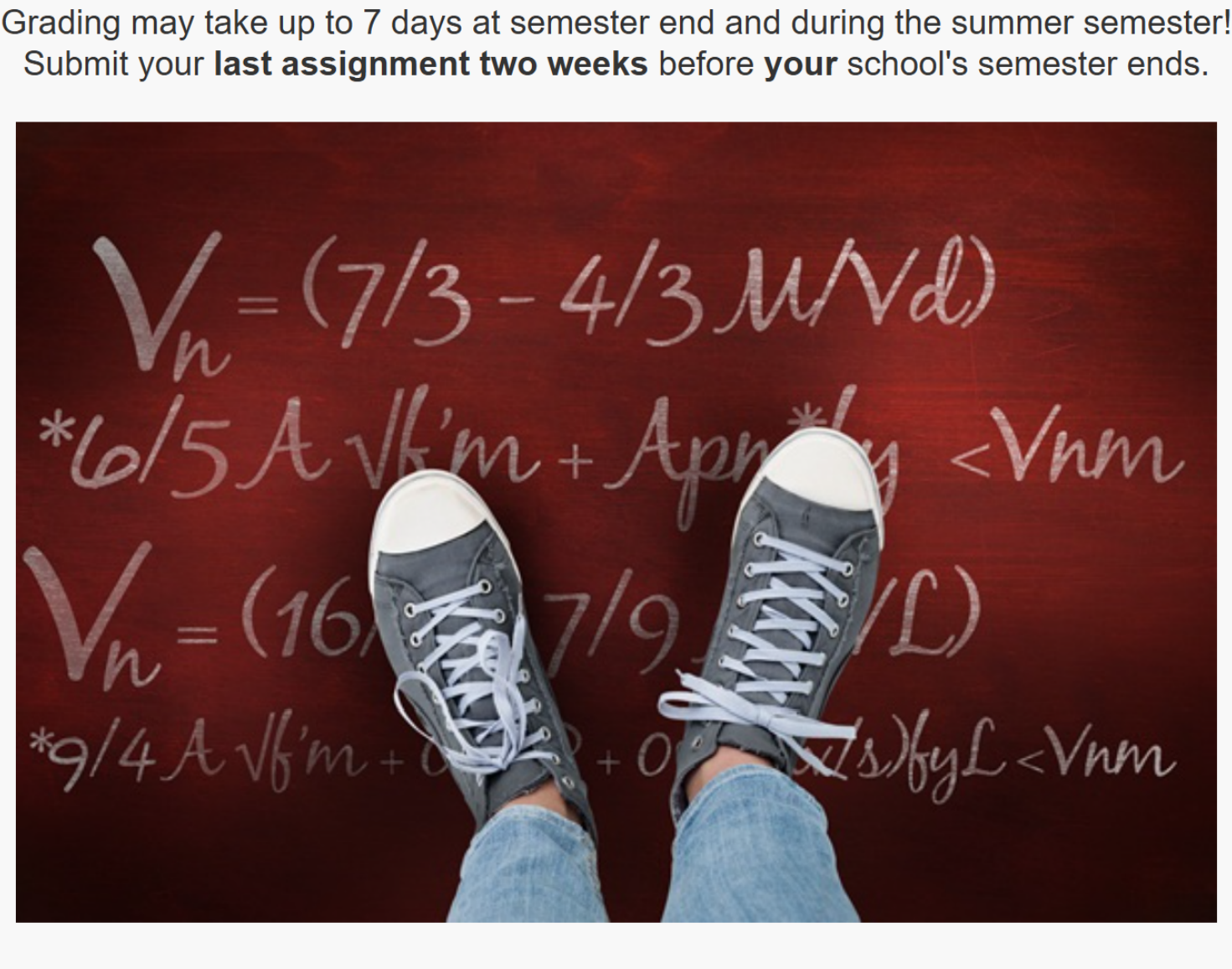
Collapse all

Integrated Math 3, Part 1

ATTENTION

Grading may take up to 7 days at semester end and during the summer semester!
Submit your last assignment two weeks before your school's semester ends.



The prerequisites for this course are: Integrated Math 1 and Integrated Math 2

How to Take This Course

Each unit includes guided notes that align with the lesson videos. The lesson quizzes, unit tests, and final exam are all based on the content covered in these videos. Most lessons also include links to optional resources or practice assignments. You're encouraged to explore these additional materials if you'd like extra support or more practice on specific topics.

Complete all the quizzes and the assignment in each unit. Once the quizzes for a unit are complete, you will have access to the unit test. We recommend you complete the unit assignment before you attempt the unit test; the assignment will help you prepare. You will have access to the final after you have been enrolled in the course for at least 30 days, all unit tests are completed, and your assignments are graded.

Allow 3-4 school days for an assignment to be graded. To understand the course grading, read the full course instructions.

Course Instructions

How This Course Works & Suggested Timeline

Submitting Your Assignments

Ask The Teacher

Meet your teacher for this course and ask a question.

Need help with the course? We offer online tutoring; find more details about it here.

MANDATORY QUIZ Completion

You are required to take this quiz before you start the course. To prepare, read the course instructions and the "submitting your assignments" document, watch the video on the how this course works page and review the suggested timeline.

Learning Objectives & Standards Met By This Course

Unit 1: Solids

In this unit, you will

- Calculate the area and perimeter of 2D polygons and composite figures, including shaded regions.
- Identify and classify three-dimensional solids, their nets, and cross sections.
- Find surface area and volume of prisms, pyramids, cones, cylinders, and spheres.
- Solve problems involving composite solids and apply formulas to calculate their surface area and volume.
- Analyze the effects of scale factor on area, surface area, and volume in similar solids.

Unit 1 Study Guide

These guided notes correspond to the instructional videos. You may use them on the unit quizzes, unit tests, and course final.

As you work through the lessons, you are encouraged to work through the practice problem set, and check your answers against the key.

Both the guided notes and the practice problem set are for your use; they will not be submitted for grading.

1.1 Area and Perimeter of Polygons

Quiz 1.1 Completion

1.2 Solids, Nets, and Cross Sections

Quiz 1.2 Completion

1.3 Surface Area of Prisms and Cylinders

Quiz 1.3 Completion

1.4 Surface Area of Pyramids and Cones

Quiz 1.4 Completion

1.5 Volume of Prisms and Cylinders

Quiz 1.5 Completion

1.6 Volume of Pyramids and Cones

Quiz 1.6 Completion

1.7 Surface Area and Volume of Spheres

Quiz 1.7 Completion

1.8 Composite Solids

Quiz 1.8 Completion

1.9 Similar Solids and Effects of Changing Dimensions

Quiz 1.9 Completion

Unit 1 Assignment: The Cereal Box Completion

Unit 1 Test

Not available unless: The activity **Quiz 1.1** is marked complete ... **Show more**

Unit 2: Linear Equations, Inequalities, and Systems

In this unit, you will

- Solve multi-step linear equations and inequalities, including those with absolute values.
- Analyze and graph linear equations and inequalities using slope, intercepts, and standard forms.
- Write linear equations given points, slopes, or contextual information, and interpret parallel and perpendicular relationships.
- Solve systems of equations and inequalities using graphing, substitution, and elimination methods.
- Apply systems of inequalities and linear programming to optimize real-world scenarios.

Unit 2 Study Guide

These guided notes correspond to the instructional videos. You may use them on the unit quizzes, unit tests, and course final.

As you work through the lessons, you are encouraged to work through the practice problem set, and check your answers against the key.

Both the guided notes and the practice problem set are for your use; they will not be submitted for grading.

2.1 Solving Equations and Inequalities

Quiz 2.1 Completion

2.2 Solving Absolute Value Equations and Inequalities

Quiz 2.2 Completion

2.3 Slope and Writing Linear Equations

Quiz 2.3 Completion

2.4 Graphing Linear Equations and Inequalities

Quiz 2.4 Completion

2.5 Solving Systems of Equations Graphically

Quiz 2.5 Completion

2.6 Solving Systems of Equations Algebraically

Quiz 2.6 Completion

2.7 Solving Systems of Inequalities

Quiz 2.7 Completion

2.8 Linear Programming

Quiz 2.8 Completion

Unit 2 Assignment: Behind the Scenes at Apex Adventure Park Completion

Unit 2 Test

Not available unless: The activity **Quiz 2.1** is marked complete ... **Show more**

Unit 3: Functions

In this unit, you will

- Explore the concept of functions, including domain, range, continuity, and function notation.
- Analyze function graphs to identify key features such as intercepts, extrema, intervals of increase/decrease, and end behavior.
- Interpret, sketch, and transform various parent functions and piecewise-defined functions.
- Perform operations with functions, including composition, and classify functions as even, odd, or neither.
- Find and verify inverse functions algebraically and graphically.

Unit 3 Study Guide

These guided notes correspond to the instructional videos. You may use them on the unit quizzes, unit tests, and course final.

As you work through the lessons, you are encouraged to work through the practice problem set, and check your answers against the key.

Both the guided notes and the practice problem set are for your use; they will not be submitted for grading.

3.1 Functions and Continuity

Quiz 3.1 Completion

3.2 Features of Functions

Quiz 3.2 Completion

3.3 Sketching Graphs of Functions

Quiz 3.3 Completion

3.4 Piecewise Functions

Quiz 3.4 Completion

3.5 Parent Functions and Transformations

Quiz 3.5 Completion

3.6 Operations on Functions

Quiz 3.6 Completion

3.7 Even and Odd Functions

Quiz 3.7 Completion

3.8 Inverse Relations and Functions

Quiz 3.8 Completion

Unit 3 Assignment: Characteristics of Functions Video Project Completion

Unit 3 Test

Not available unless: The activity **Quiz 3.1** is marked complete ... **Show more**

Unit 4: Quadratic Functions

In this unit, you will

- Analyze quadratic functions in various forms to identify key features such as vertex, axis of symmetry, and maximum or minimum values.
- Solve quadratic equations using multiple methods including graphing, factoring, completing the square, and the quadratic formula.
- Perform operations with complex numbers, including simplifying, adding, subtracting, multiplying, and dividing.
- Model real-world scenarios with quadratic functions using regression and interpret their graphs and solutions.
- Graph and solve quadratic inequalities and systems involving linear and quadratic equations.

Unit 4 Study Guide

These guided notes correspond to the instructional videos. You may use them on the unit quizzes, unit tests, and course final.

As you work through the lessons, you are encouraged to work through the practice problem set, and check your answers against the key.

Both the guided notes and the practice problem set are for your use; they will not be submitted for grading.

4.1 Quadratic Functions

Quiz 4.1 Completion

4.2 Solving Quadratic Equations by Graphing

Quiz 4.2 Completion

4.3 Complex Numbers

Quiz 4.3 Completion

4.4 Solving Quadratic Equations by Factoring

Quiz 4.4 Completion

4.5 Solving Quadratic Equations by Completing the Square

Quiz 4.5 Completion

4.6 The Quadratic Formula and the Discriminant

Quiz 4.6 Completion

4.7 Curve Fitting with Quadratic Models

Quiz 4.7 Completion

4.8 Quadratic Inequalities

Quiz 4.8 Completion

4.9 Linear-Quadratic Systems

Quiz 4.9 Completion

Unit 4 Assignment: The Quadratic Selfie Completion

Unit 4 Test

Not available unless: The activity **Quiz 4.1** is marked complete ... **Show more**

Unit 5: Polynomial Functions

In this unit, you will

- Perform operations with polynomials and apply exponent rules to simplify expressions.
- Graph polynomial functions and analyze their end behavior, turning points, and key features.
- Factor polynomials completely using a variety of techniques, including special products and factoring by grouping.
- Solve polynomial equations algebraically and graphically, and interpret their solutions.
- Explore the Binomial Theorem and Pascal's Triangle to expand binomial expressions and identify specific terms in expansions.

Unit 5 Study Guide

These guided notes correspond to the instructional videos. You may use them on the unit quizzes, unit tests, and course final.

As you work through the lessons, you are encouraged to work through the practice problem set, and check your answers against the key.

Both the guided notes and the practice problem set are for your use; they will not be submitted for grading.

5.1 Operations with Polynomials

Quiz 5.1 Completion

5.2 Graphing Polynomial Functions

Quiz 5.2 Completion

5.3 Factoring Polynomials

Quiz 5.3 Completion

5.4 Dividing Polynomials

Quiz 5.4 Completion

5.5 Solving Polynomial Equations by Graphing

Quiz 5.5 Completion

5.6 Solving Polynomial Equations Algebraically

Quiz 5.6 Completion

5.7 Zeros and Roots of Polynomial Functions

Quiz 5.7 Completion

5.8 Pascal's Triangle and the Binomial Theorem

Quiz 5.8 Completion

Unit 5 Assignment: Polynomial Division and Roots Completion

Unit 5 Test

Not available unless: The activity **Quiz 5.1** is marked complete ... **Show more**

Final Exam

You will have access to the final after you have been enrolled in the course for at least 30 days and when all unit tests are completed, and your assignments are graded.

Warning: You have only ONE attempt at the final. Are you ready to take the final? We highly recommend you take the practice final first, and if you are weak in any area, review the relevant course material again. You have unlimited attempts at the practice final; it will help you to prepare.

Remember, if you want to improve your grade in this course, you need to do that BEFORE you take the final exam.

Good Luck!!

Not available unless: The activity **MANDATORY QUIZ** is marked complete

Course Completion & Requesting a Transcript

Transcript - Send a transcript to your school to report the credits you earned. A transcript will list all the courses you have taken with us, including those still in progress.

Feedback - Before you go, we would appreciate your opinion on the course; please take 1 minute to complete the feedback form. We hope you enjoyed this course!

Course Feedback

Thank you for taking this course! Let us know what you think about it.

Request a Transcript

Notify your school that you have completed your course. Send them a transcript by email or mail. A transcript will list all the courses you have completed and those in progress.