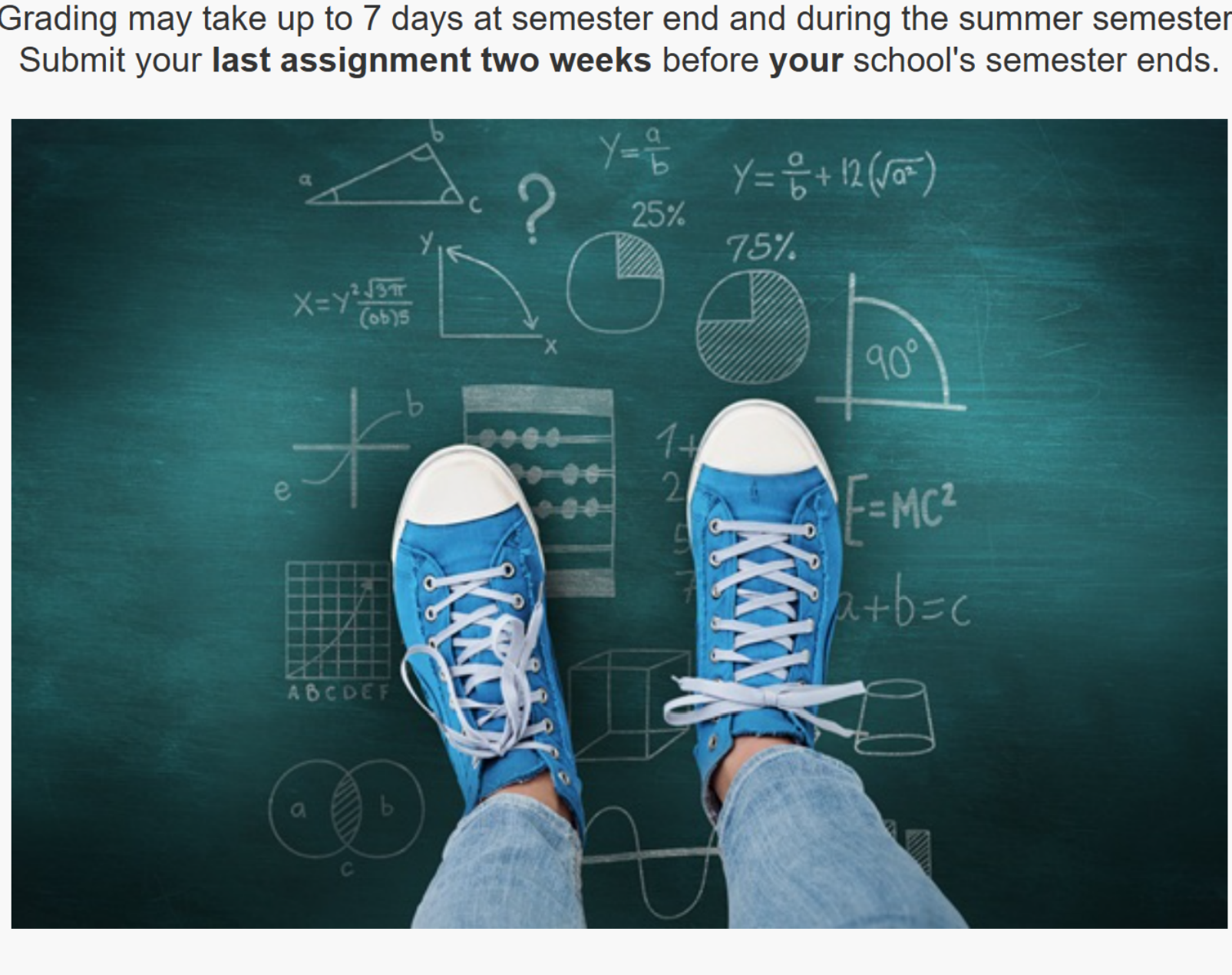
Integrated Math 1, Part 2

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 is: Integrated Math 1, Part 1

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: Parallel and Perpendicular Lines

In this unit, you will

- Identify and classify relationships between lines and angles, including parallel, perpendicular, and skew lines.
- Use transversals to recognize special angle pairs and apply angle theorems to solve problems.
- Prove lines are parallel using angle relationships and their converses.
- Apply the concept of slope to determine and write equations of parallel and perpendicular lines.
- Solve geometric problems using algebraic equations that represent relationships between angles and lines.

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 Lines and Angles

Quiz 1.1 Completion

1.2 Parallel Lines and Algebra

Quiz 1.2 Completion

1.3 Proving Lines Parallel

Quiz 1.3 Completion

1.4 Slope and Equations of Parallel Lines

Quiz 1.4 Completion

1.5 Slope and Equations of Perpendicular Lines

Quiz 1.5 Completion

Unit 1 Assignment: Design a City Completion

Unit 1 Test

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

Unit 2: Systems of Equations and Inequalities

In this unit, you will

- Solve systems of linear equations using graphing, substitution, and elimination methods.
- Identify systems that have one solution, no solution, or infinitely many solutions.
- Apply systems of equations to solve real-world word problems involving two variables.
- Graph and interpret solutions to systems of linear inequalities.
- Analyze overlapping solution regions for systems of inequalities and determine feasible solutions.

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.

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2.1 Solving Systems by Graphing

Quiz 2.1 Completion

2.2 Solving Systems Using Substitution

Quiz 2.2 Completion

2.3 Solving Systems Using Elimination

Quiz 2.3 Completion

2.4 Solving Special Systems

Quiz 2.4 Completion

2.5 Applying Systems

Quiz 2.5 Completion

2.6 Solving Systems of Linear Inequalities

Quiz 2.6 Completion

Unit 2 Assignment: Systems of Equations and Inequalities Completion

Unit 2 Test

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Unit 3: Rigid Motion and Congruence

In this unit, you will

- Classify triangles by sides and angles and apply the Triangle Sum and Exterior Angle Theorems.
- Describe and perform rigid transformations—translations, reflections, and rotations—on the coordinate plane.
- Identify line, point, and rotational symmetry and explore compositions of transformations.
- Prove figures and triangles congruent using SSS, SAS, ASA, AAS, HL, and CPCTC.
- Solve problems involving isosceles and equilateral triangles using triangle congruence and geometric reasoning.

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.

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3.1 Classifying Triangles and Angles of Triangles

Quiz 3.1 Completion

3.2 Rigid Transformations

Quiz 3.2 Completion

3.3 Symmetry

Quiz 3.3 Completion

3.4 Compositions of Transformations

Quiz 3.4 Completion

3.5 Congruent Figures

Quiz 3.5 Completion

3.6 Congruent Triangles (SSS, SAS)

Quiz 3.6 Completion

3.7 Congruent Triangles (ASA, AAS)

Quiz 3.7 Completion

3.8 HL and CPCTC

Quiz 3.8 Completion

3.9 Isosceles and Equilateral Triangles

Quiz 3.9 Completion

Unit 3 Assignment: Transformations in Action Completion

Unit 3 Test

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

Unit 4: Relationships in Triangles

In this unit, you will

- Explore triangle centers by constructing and analyzing midsegments, angle bisectors, perpendicular bisectors, medians, and altitudes.
- Identify and apply properties of points of concurrency: circumcenter, incenter, centroid, and orthocenter.
- Solve problems using triangle inequality theorems, including the Triangle Inequality and Hinge Theorems.
- Use indirect reasoning to prove geometric conjectures.
- Apply triangle relationships to classify sides and angles and solve problems involving triangles.

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 Midsegments of a Triangle

Quiz 4.1 Completion

4.2 Perpendicular and Angle Bisectors

Quiz 4.2 Completion

4.3 Medians and Altitudes of Triangles

Quiz 4.3 Completion

4.4 Constructing Centers of Triangles

Quiz 4.4 Completion

4.5 Indirect Proofs

Quiz 4.5 Completion

4.6 Inequalities in One and Two Triangles

Quiz 4.6 Completion

Unit 4 Assignment: Points of Concurrency Poster Completion

Unit 4 Test

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

Unit 5: Statistics and Data Analysis

In this unit, you will

- Classify data as quantitative or qualitative, and understand concepts like sample, population, and types of variables.
- Calculate and interpret measures of center and spread, including mean, median, mode, range, IQR, and standard deviation.
- Represent and analyze univariate data using visual tools such as dot plots, box plots, histograms, bar graphs, and pie charts.
- Create and interpret two-way frequency tables and calculate joint, marginal, and conditional relative frequencies.
- Analyze scatterplots, fit and interpret linear models, assess model accuracy using residuals, and distinguish between correlation and causation.

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 Quantitative and Qualitative Data

Quiz 5.1 Completion

5.2 Measures of Center and Spread

Quiz 5.2 Completion

5.3 Representing Univariate Data

Quiz 5.3 Completion

5.4 Two-Way Frequency Tables

Quiz 5.4 Completion

5.5 Scatterplots and Linear Relationships

Quiz 5.5 Completion

5.6 Trend Lines and Interpreting Linear Models

Quiz 5.6 Completion

5.7 Line of Best Fit and Evaluating Linear Models

Quiz 5.7 Completion

Unit 5 Assignment: Exploring Data 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.