

uCertify

# Course Outline

SAT® Math



05 Jul 2024

1. Course Objective
2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary  
Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons
  - Syllabus
  - Chapter 1: Introduction
  - Chapter 2: Welcome to SAT Math
  - Chapter 3: Review of Pre-Algebra
  - Chapter 4: Algebra I Reboot Part 1: Expressions
  - Chapter 5: Algebra I Reboot Part 2: Equations and Inequalities
  - Chapter 6: Linear Functions
  - Chapter 7: Systems of Equations
  - Chapter 8: Ratios, Proportions, and Percentages
  - Chapter 9: Statistics and Probability
  - Chapter 10: Understanding Data and Information from Tables and Graphs
  - Chapter 11: Functions
  - Chapter 12: Polynomials
  - Chapter 13: Quadratic Functions
  - Chapter 14: Exponential and Radical Equations
  - Chapter 15: Geometry and Trigonometry
  - Chapter 16: Additional SAT Math Topics
  - Chapter 17: Practice SAT Math Test 1
  - Chapter 18: Practice SAT Math Test 2

Chapter 19: Practice SAT Math Test 3

Chapter 20: Ten Things You Will Almost Definitely See on Your SAT Math Test

Chapter 21: Ten Tips to Improve Your SAT Math Score

Chapter 22: Ten Tips to Be at Your Best on the SAT

Videos and How To

9. Practice Test

Here's what you get

Features

## 1. Course Objective

SAT-MATH focuses exclusively on preparing you for the math portion of the SAT. Covering algebra, geometry, trigonometry, functions and graphs, and statistics and probability, this course hones your problem-solving skills and equips you with the knowledge needed to excel in the test. You'll find SAT-specific math skills, numerous practice questions, and practice tests. With interactive lessons, quizzes, and practice tests, this course ensures you're well-prepared to achieve your best SAT math score.

## 2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

## 3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

**134**  
EXERCISES

## 4. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 5. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 6. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 7. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
  1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- 2020
  1. Best College and Career Readiness Solution
  2. Best Cross-Curricular Solution
  3. Best Virtual Learning Solution

## 8. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

### Syllabus

#### Chapter 1: Introduction

- About This Course
- Assumptions
- Icons Used in This Course
- Where to Go from Here

#### Chapter 2: Welcome to SAT Math

- SAT Math Basics

- Overview of SAT Math Topics
- SAT Math Strategy
- Three SAT Success Stories

### Chapter 3: Review of Pre-Algebra

- Sets of Numbers
- Fractions, Ratios, Decimals, and Percentages
- Absolute Value
- Radicals
- Understanding Algebra Terminology
- Graphing on the  $xy$ -Plane
- Choosing and Using a Calculator

### Chapter 4: Algebra I Reboot Part 1: Expressions

- Evaluating Expressions
- Simplifying Expressions
- Factoring Expressions

### Chapter 5: Algebra I Reboot Part 2: Equations and Inequalities



- Solving Simple and Intermediate Algebra Equations
- Solving More Difficult Equations
- Solving Inequalities

## Chapter 6: Linear Functions

- Interpreting Linear Functions as Words, Tables, Graphs, and Equations
- Linear Function Basics
- Using Two Formulas to Find the Slope
- Solving Linear Function Problems
- Solving Word Problems

## Chapter 7: Systems of Equations

- Systems of Linear Equations
- Working with Problematic Systems of Equations
- Systems of Linear Inequalities
- Systems of Non-Linear Equations

## Chapter 8: Ratios, Proportions, and Percentages

- Understanding Ratios and Proportions

- Using Ratios and Proportions to Solve SAT Word Problems
- Using Percentages to Answer SAT Questions

## Chapter 9: Statistics and Probability

- Statistics
- Probability

## Chapter 10: Understanding Data and Information from Tables and Graphs

- Reading Information from Tables
- Understanding Bar Graphs, Histograms, and Dot Plots
- Working with Line Graphs and Scatterplots

## Chapter 11: Functions

- Understanding Function Notation
- Working with Function Notation
- Using the Vertical Line Test for Functions
- Knowing Some Key Parent Functions
- Transforming Functions

## Chapter 12: Polynomials

- Knowing Polynomial Basics
- Identifying Odd and Even Polynomials
- Finding the x-Intercepts of Polynomials
- Sketching the Graph of a Polynomial
- Equivalent Polynomials
- Recalling Synthetic Division for Polynomials

### Chapter 13: Quadratic Functions

- The Quadratic Function in Standard Form
- The Quadratic Function in Vertex Form
- Connecting Standard and Vertex Forms
- Finding the Roots of a Quadratic Function

### Chapter 14: Exponential and Radical Equations

- Solving Exponential Equations
- Answering SAT Math Questions Using Exponential Functions
- Graphing Exponential Functions
- Radical Equations and Functions

## Chapter 15: Geometry and Trigonometry

- Geometry
- Trigonometry

## Chapter 16: Additional SAT Math Topics

- Imaginary and Complex Numbers
- Circles on the  $xy$ -Plane

## Chapter 17: Practice SAT Math Test 1

- Section 3 — No Calculator
- Section 4 — Calculator

## Chapter 18: Practice SAT Math Test 2

- Section 3 — No Calculator
- Section 4 — Calculator

## Chapter 19: Practice SAT Math Test 3

## Chapter 20: Ten Things You Will Almost Definitely See on Your SAT Math Test

- Linear Functions

- Systems of Linear Equations
- Quadratic Functions
- Percentages
- Ratio/Proportion Problems
- The Mean and the Median
- The Trig Identity
- The Quadratic Formula
- The Imaginary Number  $i$
- Circles on the Graph

## Chapter 21: Ten Tips to Improve Your SAT Math Score

- Study Diligently in Your Math Classes
- Get Good at Doing Basic Calculations in Your Head
- Get Good at Using Your Calculator
- Study SAT-Specific Math Skills
- Get Comfortable Turning Words into Numbers
- Take Timed Practice Tests
- When Taking Practice Tests, Budget Your Time to Maximize Your Score

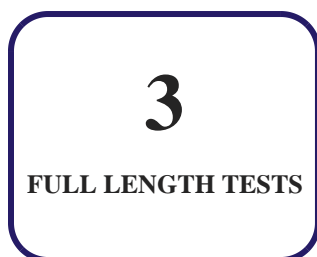
- Study from Your Timed Practice Tests
- Retake Your Timed Practice Tests
- Take the SAT More than Once

## Chapter 22: Ten Tips to Be at Your Best on the SAT

- Do Something Fun the Day Before the Test
- Don't Study for More than 20 Minutes the Night Before the Test
- Pack Everything You Need the Night Before
- Do Something Relaxing Before Bed
- Get a Good Night's Sleep
- Wear Several Layers of Clothing
- Arrive at the Test Site Extra Early
- Spend Your Time Just Before the Test However You Please
- Remember to Breathe
- Skip Over Any Questions That Throw You

## 9. Practice Test

## Here's what you get



## Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.


### Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.


Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

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