No-Calculator Section

- 25 minutes
- 20 questions
 - o 5 grid-in questions
 - o About 1.25 minutes per question
 - o No "Problem Solving and Data Analysis" questions

Calculator Section

- 55 minutes long
- 38 questions
 - o 8 grid-in questions
 - o Approximately 1.4 minutes per question

Topics:

- Heart of Algebra (33%): core concepts in algebra
 - o Transforming Algebraic Expressions
 - o Manipulating Linear Equations
 - Inequalities
 - Absolute Value (including absolute value inequalities)
 - Systems of Equations and Inequalities: substitution method, elimination method, transforming equations and systems of inequalities
 - Linear Functions
 - o Interpreting Equations: Understanding and working with word problems
 - Graphing Equations and Inequalities
- Passport to Advanced Math (28%): setting the foundation for students in first-year college-level
 math courses.
 - o Polynomials: polynomial expressions and factoring polynomials
 - o Quadratics: equations, functions, and graphs
 - o Other advanced equations: exponential equations, radical equations, etc.
 - Applications of functions: graphs and science studies

- **Problem Solving and Data Analysis (29%):** multi-step problems, analyzing relationships, interpreting qualitative and quantitative data. This question type only occurs in the **Calculator section** of the Math Test.
 - o Measures of Central Tendency: range, mean, median, mode
 - o Analysis of Graphics: all types of charts and graphs
 - o Ratios and Rates
 - o Percentages and Proportions
 - Probability
 - Using Data as Evidence

• Additional Topics (10%):

- o Plane and Solid Geometry: right triangles, angles and volumes, radians and degrees, circles
- o Complex Numbers

Questions:

- MC questions and SPR questions get progressively more complex within each section, but are all weighted the same.
- SPR questions are always at the end of the section.

Subjects This Section Covers

SAT Math covers 24 main topics, within four main sections. The first two sections below, basic algebra and advanced algebra, both fit within the College Board's "Heart of Algebra" subject area.

Basic Algebra

- Linear functions
- Single variable equations
- · Systems of linear equations
- Absolute value

Advanced Algebra

- Manipulating polynomials
- · Quadratic equations
- Dividing polynomials
- Exponential functions
- Function notation
- Solving exponential equations
- Solving exponential equations

Problem Solving and Data Analysis

- Ratios and proportions
- Scatterplots and graphs
- Categorical data and probabilities
- Experimental interpretation
- Median, median, mode, standard deviation

Additional Topics

- Coordinate geometry lines and slopes
- Coordinate geometry nonlinear functions
- Geometry circles
- Geometry lines and angles
- · Geometry solid geometry
- Geometry triangles and polygons
- Trigonometry
- Complex numbers

The majority of questions (over half) will be on algebra, so this is the subject you should focus most of your studying on.

A maximum of 10% of questions will cover geometry and trigonometry, and these questions will ask only basic questions on these subjects, so if you haven't taken classes in either of them, you should still be able to learn the information you need to know fairly easily.