

# SAT Math (G9-12)

## SAT 数学提高班

Spring (春季), 2022

### Instructor (教师姓名)

Sida Wang (王思达)

### Email (邮件)

sidawang@gmail.com

### Location and Time (地点, 时间)

BSN-1309, Sunday 2:45-4:15pm

### Description (课程简介)

This program aims to prepare students (9th grade and up) for the SAT Math Test and to offer student an opportunity to learn and build a solid foundation in solving math problems as well. It covers algebra, geometry, data analysis and problem-solving skills. Mr. Wang holds a BS degree in mathematics and has been in teaching and tutoring for several years. He is very passionate about exploring student math potential and is looking forward to working with the students for a pleasant and enjoyable math learning experiences.

In the class, we will

- review the topics and contents required for SAT/ACT math exam
- learn and enhance skills/methods/tactics for solving math questions
- practice various questions in the four areas: Heart of Algebra, Problem Solving and Data Analysis, Passport to Advanced Math and Additional Topics in Math
- Identify your areas that need improvement by doing diagnostic tests and SAT exams
- Increase your interest in Math, confidence in test taking, and SAT score
- connect elementary concepts to advanced math

### Prerequisite:

Algebra I or equivalent knowledge

### Age recommendations (学生年龄段):

9th grade math level, or equivalent, or SAT math score is 650 or higher

### Expectations and Goals (期望和目标)

Review basic algebra knowledge and introduce the SAT required contents that are new to the 7th/8th grade students. Different from traditional classes, we teach student how to approach a question with various methods and choose the best way. Students should improve their SAT scores by 50+ points at the end of the course.

### Required Materials (必需用品)

Pencil, paper and calculator

### Textbooks (教材)

Barron's SAT Premium Study Guide

Barron's Math Workbook for the NEW SAT 6<sup>th</sup> Edition

### Resources (复习材料)

[College Board SAT STUDY GUIDE](#)

[Khan Academy](#)

### Grading (评分标准):

SAT scoring will be used for each of the SAT practice tests. Regular homework is graded with grades A to D, where A indicates most of the answers are correct, B indicates more than half of the answers are correct, C indicates some of the answers are correct, D indicates few of the answers are correct.

### Course Schedule (课程安排)

Class time allocation will be 15% on reviewing and introducing new contents and 85% on problem solving. 4 SAT practices will be assigned. There are 15 lessons for Fall Semester of 2021. In each lesson we will review the contents and then do questions. Students are encouraged for class discussion. Students are required to do homework (approximately 7 questions after each lesson) and do 4 SAT exams. Errors from exams and homework will be analyzed and discussed.

#### Week (周)

#### Topic (上课内容)

Week 1 (1/9)	Overview of SAT/ACT and test taking strategy
Week 2 (1/16)	No Class, MLK Holiday/无课
Week 3 (1/23)	Algebraic expressions, operations, polynomials, and algebraic fractions
Week 4 (1/30)	Comprehensive arithmetic questions
Week 5 (2/6)	Labor Holiday, No Class
Week 6 (2/13)	Linear equation system, linear inequalities, and their geometric presentation
Week 7 (2/20)	Quadratic equation and geometric presentation
Week 8 (2/27)	Other equations, sequences, and functions
Week 9 (3/6)	Problem solving ratio, percent, table, graph and analysis
Week 10 (3/13)	No class, Spring Break/无课
Week 11 (3/20)	Geometry - lines, angles and triangles, trigonometry
Week 12 (3/27)	Geometry - quadrilaterals, circles
Week 13 (4/3)	Geometry - solid geometry, coordinate geometry
Week 14 (4/10)	Probability, statistics and data analysis
Week 15 (4/17)	No class, Easter Weekend/无课
Week 16 (4/24)	Comprehensive SAT questions
Week 17 (5/1)	Comprehensive SAT questions
Week 18 (5/8)	Comprehensive SAT questions
Week 19 (5/15)	Final Exam
Week 20 (5/22)	School Event