# **SAT Math**

# SAT 数学班

**FALL, 2022** 

Instructor (教师姓名)

Email (邮件)

Location and Time (地点, 时间)

Sida Wang(王思达)

sidawang@gmail.com

BSN-1101, Sunday 1:00-2:30pm

## Description (课程简介)

This program aims to prepare students (7th 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. 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 experience.

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

#### 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 - 200 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 6th 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.

### Course Schedule (课程安排)

Class time allocation will be 50% on reviewing and introducing new contents and 50% on problem solving. 4 SAT practices will be assigned. There are 15 lessons for Fall Semester of 2022. 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 2 (8/21) Algebraic expressions, operations, polynomials, and algebraic fractions  Week 3 (8/28) Comprehensive arithmetic questions  Week 4 (9/4) No Class, Labor Day Weekend 无课,劳动节  Week 5 (9/11) Linear equation system, linear inequalities, and their geometric presentation  Week 6 (9/18) Quadratic equation and geometric presentation  Week 7 (9/25) Other equations, sequences, and functions  Week 8 (10/2) Problem solving ratio, percent, table, graph and analysis  Week 9 (10/9) Geometry - lines, angles and triangles, trigonometry  Week 10 (10/16) Geometry - quadrilaterals, circles  Week 11 (10/23) Geometry - solid geometry, coordinate geometry  Week 12 (10/30) Probability, statistics and data analysis  Week 13 (11/6) Comprehensive SAT questions  Comprehensive SAT questions  Comprehensive SAT questions (Final Exam)  Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室		
and algebraic fractions  Week 3 (8/28) Comprehensive arithmetic questions  Week 4 (9/4) No Class, Labor Day Weekend 无课,劳动节  Week 5 (9/11) Linear equation system, linear inequalities, and their geometric presentation  Week 6 (9/18) Quadratic equation and geometric presentation  Week 7 (9/25) Other equations, sequences, and functions  Week 8 (10/2) Problem solving ratio, percent, table, graph and analysis  Week 9 (10/9) Geometry - lines, angles and triangles, trigonometry  Week 10 (10/16) Geometry - quadrilaterals, circles  Week 11 (10/23) Geometry - solid geometry, coordinate geometry  Week 12 (10/30) Probability, statistics and data analysis  Week 13 (11/6) Comprehensive SAT questions  Week 14 (11/13) Comprehensive SAT questions  Week 15 (11/20) Comprehensive SAT questions (Final Exam)  Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室  Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 1 (8/14)	Overview of SAT/ACT and test taking strategy
Week 4 (9/4)  No Class, Labor Day Weekend 无课,劳动节  Linear equation system, linear inequalities, and their geometric presentation  Week 6 (9/18)  Quadratic equation and geometric presentation  Week 7 (9/25)  Other equations, sequences, and functions  Week 8 (10/2)  Problem solving ratio, percent, table, graph and analysis  Week 9 (10/9)  Geometry - lines, angles and triangles, trigonometry  Week 10 (10/16)  Geometry - quadrilaterals, circles  Week 11 (10/23)  Geometry - solid geometry, coordinate geometry  Week 12 (10/30)  Probability, statistics and data analysis  Week 13 (11/6)  Comprehensive SAT questions  Week 14 (11/13)  Comprehensive SAT questions  Week 15 (11/20)  Comprehensive SAT questions (Final Exam)  Week 16 (11/27)  No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4)  No Class. USF Final Exam 无课,USF 无教室  Week 18 (12/11)  End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 2 (8/21)	
Week 5 (9/11) Linear equation system, linear inequalities, and their geometric presentation  Week 6 (9/18) Quadratic equation and geometric presentation  Week 7 (9/25) Other equations, sequences, and functions  Week 8 (10/2) Problem solving ratio, percent, table, graph and analysis  Week 9 (10/9) Geometry - lines, angles and triangles, trigonometry  Week 10 (10/16) Geometry - quadrilaterals, circles  Week 11 (10/23) Geometry - solid geometry, coordinate geometry  Week 12 (10/30) Probability, statistics and data analysis  Week 13 (11/6) Comprehensive SAT questions  Week 14 (11/13) Comprehensive SAT questions  Week 15 (11/20) Comprehensive SAT questions (Final Exam)  Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室  Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 3 (8/28)	Comprehensive arithmetic questions
their geometric presentation  Week 6 (9/18)  Quadratic equation and geometric presentation  Week 7 (9/25)  Other equations, sequences, and functions  Week 8 (10/2)  Problem solving ratio, percent, table, graph and analysis  Week 9 (10/9)  Geometry - lines, angles and triangles, trigonometry  Week 10 (10/16)  Geometry - quadrilaterals, circles  Week 11 (10/23)  Geometry - solid geometry, coordinate geometry  Week 12 (10/30)  Probability, statistics and data analysis  Week 13 (11/6)  Comprehensive SAT questions  Week 14 (11/13)  Comprehensive SAT questions (Final Exam)  Week 15 (11/20)  Comprehensive SAT questions (Final Exam)  Week 16 (11/27)  No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4)  No Class. USF Final Exam 无课,USF 无教室  End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 4 (9/4)	No Class, Labor Day Weekend 无课,劳动节
Week 7 (9/25) Other equations, sequences, and functions Week 8 (10/2) Problem solving ratio, percent, table, graph and analysis Week 9 (10/9) Geometry - lines, angles and triangles, trigonometry Week 10 (10/16) Geometry - quadrilaterals, circles Week 11 (10/23) Geometry - solid geometry, coordinate geometry Week 12 (10/30) Probability, statistics and data analysis Week 13 (11/6) Comprehensive SAT questions Week 14 (11/13) Comprehensive SAT questions Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 5 (9/11)	
Week 8 (10/2) Problem solving ratio, percent, table, graph and analysis  Week 9 (10/9) Geometry - lines, angles and triangles, trigonometry  Week 10 (10/16) Geometry - quadrilaterals, circles  Week 11 (10/23) Geometry - solid geometry, coordinate geometry  Week 12 (10/30) Probability, statistics and data analysis  Week 13 (11/6) Comprehensive SAT questions  Week 14 (11/13) Comprehensive SAT questions  Week 15 (11/20) Comprehensive SAT questions (Final Exam)  Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室  Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 6 (9/18)	Quadratic equation and geometric presentation
week 9 (10/9) Geometry - lines, angles and triangles, trigonometry Week 10 (10/16) Geometry - quadrilaterals, circles Week 11 (10/23) Geometry - solid geometry, coordinate geometry Week 12 (10/30) Probability, statistics and data analysis Week 13 (11/6) Comprehensive SAT questions Week 14 (11/13) Comprehensive SAT questions Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 7 (9/25)	Other equations, sequences, and functions
trigonometry  Week 10 (10/16) Geometry - quadrilaterals, circles  Week 11 (10/23) Geometry - solid geometry, coordinate geometry  Week 12 (10/30) Probability, statistics and data analysis  Week 13 (11/6) Comprehensive SAT questions  Week 14 (11/13) Comprehensive SAT questions  Week 15 (11/20) Comprehensive SAT questions (Final Exam)  Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末  Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室  Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 8 (10/2)	
Week 11 (10/23) Geometry - solid geometry, coordinate geometry Week 12 (10/30) Probability, statistics and data analysis Week 13 (11/6) Comprehensive SAT questions Week 14 (11/13) Comprehensive SAT questions Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 9 (10/9)	
Week 12 (10/30) Probability, statistics and data analysis Week 13 (11/6) Comprehensive SAT questions Week 14 (11/13) Comprehensive SAT questions Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 10 (10/16)	Geometry - quadrilaterals, circles
Week 13 (11/6) Comprehensive SAT questions Week 14 (11/13) Comprehensive SAT questions Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 11 (10/23)	Geometry - solid geometry, coordinate geometry
Week 14 (11/13) Comprehensive SAT questions Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 12 (10/30)	Probability, statistics and data analysis
Week 15 (11/20) Comprehensive SAT questions (Final Exam) Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 13 (11/6)	Comprehensive SAT questions
Week 16 (11/27) No Class. Thanksgiving Weekend 无课,感恩节周末 Week 17 (12/4) No Class. USF Final Exam 无课,USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 14 (11/13)	Comprehensive SAT questions
Week 17 (12/4) No Class. USF Final Exam 无课, USF 无教室 Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 15 (11/20)	Comprehensive SAT questions (Final Exam)
Week 18 (12/11) End of Semester Event USF Business Building Room BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 16 (11/27)	No Class. Thanksgiving Weekend 无课,感恩节周末
BSN1100 9:00 am - 3:00 pm. Last day of school,	Week 17 (12/4)	No Class. USF Final Exam 无课, USF 无教室
	Week 18 (12/11)	BSN1100 9:00 am - 3:00 pm. Last day of school,