



**SAMSEN WITTAYALAI SCHOOL
ENGLISH PROGRAM**

COURSE OUTLINE

Subject: Math for SAT (MA30211)

Course Classification: Foundation Additional

Learning Period: 2 Periods/Week

Credit Unit: 1.0

Grade Level: Mattayomsuksa 5 (Grade 11)

Semester 1, Academic Year 2022

Learning Area: Mathematics

Samsenwittayalai School English Program

Teacher: Dr.Kittipat Wong

I. COURSE DESCRIPTION

This course prepares M.5 students for Mathematics SAT exam. It provides a thorough review of both the content and most effective strategies for all four main topics in Math SAT exam. The four topics are (1) **Heart of Algebra** such as fractions, decimals, percentages, ratios and proportions and averages, (2) **Geometry and Trigonometry** such as lines and angles, triangles, quadrilaterals and other polygons, circles, solid geometry and coordinate geometry, (3) **Passport to Advanced Math** such as counting and probability, logical reasoning, solving equations and inequalities, and functions and their graphs, (4) **Problem Solving and Data Analysis**.

By engaging lectures to review selected topics, letting students practice problems as many as possible, using team-based competition to make math problems a little less tedious, these should be a good preparatory course for Math SAT exam.

This course includes not only practice problems on each of the four main topics mentioned above, but also realistic mock tests to ensure students are well prepared for actual SAT tests.

II. LEARNING OUTCOMES

1. Learners' reading, analytical thinking and writing skills meet the criteria prescribed by the respective educational institutions.
2. Learners' desirable characteristics meet the criteria prescribed by the respective educational institutions.
3. Learners are able to perform basic arithmetic calculations including fractions, decimals, percentages, ratios and proportions and averages.
4. Learners are able to perform algebra calculations involving polynomials, solving equations and inequalities and word problems.
5. Learners are able to solve geometry and trigonometry problems such as lines and angles, triangles, quadrilaterals and other polygons, circles, solid geometry and coordinate geometry.
6. Learners are able to solve problems involving counting and probability, logical reasoning, interpretation of data, functions and their graphs.

III. TENTATIVE COURSE OUTLINE

Week	Topics / Contents	Learning outcome	Period(s)
1	Introduction to the course	1,2	1
1-2	Review and practice the problems on Heart of Algebra topic	3,4	4
3-4	Review and practice the problems on Geometry and Trigonometry topic	4,5	4
5-6	Review and practice the problems on Passport to Advanced Math topic	6	4
7-8	Review and practice the problems on Problem Solving and Data Analysis topic	6	4
9	Midterm Exam		
10-17	Mock exams	3-6	16
18	Final Examination		

IV. TEACHING METHODS AND MANAGEMENT

- Lecture/Discussion
- Individual work
- Group work

V. TEACHING MATERIALS/SUPPLEMENTS

- Handouts
- Worksheets
- Exercises

VI. ASSESSMENT AND EVALUATION

Learning outcome core from SGS	Formative I			Midterm	Formative II					Final
	1	2			10	11	12	13		
Total score	10	15		15	10	10	10	10		20
1.Learners' reading, analytical thinking					10					
2. Learners' desirable characteristics						10				
LO 3	10			15						
LO 4		15								
LO 5							10			20
LO 6							10			
Total	25			15	40					20

VII. ASSIGNMENT

No.	Assignment	Score (points)	Dead line	Type		Remark
				Individual	Group	
1.	Quiz I	10	June	✓		
2.	Group work project	5	July		✓	
3.	Quiz II	15	August	✓		
4.	Group work project	5	August		✓	
Total		35				