



**SAMSEN WITTAYALAI SCHOOL  
ENGLISH PROGRAM**

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**COURSE OUTLINE**

**Subject:** Basic Mathematics (MA22211)

**Learning Period:** 2 Periods/Week

**Grade Level:** Mattayomsuksa 2 (Grade 8)

**Learning Area:** Basic Mathematics

**Teacher:** Ms. Daisy Ladiong

**Course Classification:**  Additional

**Credit Unit:** 1.0

**Semester:** 1 **Academic Year:** 2022

**Samsenwittayalai School English Program**

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**I. COURSE DESCRIPTION**

The course is aimed to study and practice skills / processes in the following areas: Application of percentage ratio, percentage ratio, problem, percentage ratio; Applications of real numbers, rational numbers, irrational numbers, properties of real numbers, square roots, third roots, nth roots; Polynomial addition, polynomial subtraction, polynomial multiplication and polynomial division.

By giving learners an experience or situations to study with practice, experimenting, summarizing, and using problem-solving process such as communication and mathematical meaning; reasoning and creativity

For learners to develop skills in calculation, problem-solving, reasoning, mathematical communication; application of experience; knowledge, obtained processes in learning things in daily life creatively as well as appreciation with good attitude on mathematics, ability to work systematically, orderly carefully, responsibly, mindfully, and confidently. To create a better understanding or create a general case by using the knowledge gained from studying several example cases. Apply mathematics to solve real-life problems. Persistence in understanding problems and solving them. Mathematically, construct reasons to support one's own ideas or to reasonably argue others' ideas. Identify recurring traits and apply them to understand or solve problems in different situations.

## II. LEARNING OUTCOMES

1. Students can read, think and analyze according to the criteria set by the school.
2. Students can meet desirable characteristics according to the criteria set by the school.
3. Students can apply their knowledge of percentage ratios to problem solving.
4. Students can apply their knowledge of real numbers to solve problems.
5. Students can use polynomials to solve math problems.

## III. TENTATIVE COURSE OUTLINE

Week	Learning Unit	Contents	Period(s)
1	Unit 1: Application of ratio and percentage	Ratio	1.5
2		Proportion	2
3		Percentage	2
4-5		Application of ratio and percentage	4
6	Unit 2: Real Number Application	Irrational Numbers	1
6-7		Real Numbers	2
7		Quiz	1
8	<b>Midterm Exam</b>		
10	Unit 2: Real Number Application	Square root	2
10-11		Third Root	3
11-12		Nth Root	3
13	Unit 3: Polynomials	Addition and Subtraction of Polynomials	2
14		Multiplication and Division of Polynomials	2
15-17		Solving Polynomial Equation	5
17		Quiz	1
18	<b>Final Exam</b>		

## IV. Teaching Methods and Management0

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| <input type="checkbox"/> Experiment                 | <input checked="" type="checkbox"/> Lecture/Discussion | <input checked="" type="checkbox"/> Group work |
| <input checked="" type="checkbox"/> Individual work | <input checked="" type="checkbox"/> Game               | <input type="checkbox"/> Song                  |
| <input checked="" type="checkbox"/> Self-learning   | <input type="checkbox"/> Demonstration                 | <input type="checkbox"/> Role play             |
| <input checked="" type="checkbox"/> Project         | <input type="checkbox"/> Experience                    | <input type="checkbox"/> ICT                   |
| <input type="checkbox"/> Local Wisdom based         | <input checked="" type="checkbox"/> Others             |  |



## VII. Assignment

SGS No.	Score (points)	Assignment	Deadline	Type		
				Test	Individual	Group
1	20	<ul style="list-style-type: none"><li>Exercises and worksheets</li><li>End of chapter examinations</li></ul>	Week 7		✓	
Midterm	10	Midterm Exam	Week 9	✓		
10	10	Learners' reading, analytical thinking	Week 18		✓	
11	10	Learners' desirable characteristics	Week 18		✓	
12	20	<ul style="list-style-type: none"><li>Exercises and worksheets</li><li>End of chapter examinations</li></ul>	Week 15		✓	
Final	30	Final Exam	Week 18	✓		

**Note: 1. Assignment are quiz, homework, exercise report or project etc.  
2. The details in assessment and evaluation are tentative.**