

**YISHUN SECONDARY SCHOOL
ADDITIONAL MATHEMATICS
SECONDARY 3 EXPRESS 2023**

Mathematics Curriculum		Key Programmes
In line with the requirements of the Mathematics Syllabus, teaching of Math at YSS focuses on developing thinking, reasoning and problem-solving skills using Math Modelling, investigations and making connections among mathematical concepts.		
Term 1	Chapter	Assessment
Week 1 (New Year's Day – Mon)	Teacher's expectations Hand up Holiday Assignment Back-to-school programme	
Week 2	3.1 Surds 3.2 Simplifying expressions involving surds	Use of SLS
Week 3 (HBL – Fri)	3.3 Solving equations involving surds	
Week 4 (CNY – Mon, Tue)	1.1 Quadratic functions of the form $y = a(x - p)(x - q)$ 1.2 Quadratic functions of the form $y = a(x - h)^2 + k$	
Week 5 (HBL – Fri)	1.3 Conditions for quadratic curve to lie completely above or below x-axis 1.4 Quadratic functions in real-world contexts	
Week 6	2.1 Solving quadratic equations by completing the square (coefficient of x^2 is not 1) 2.2 Solving quadratic equations using the Quadratic formula	
Week 7 (HBL – Fri)	2.3 Solving linear and non-linear simultaneous equations 2.4 Solving quadratic inequalities	
Week 8	4.1 Polynomials	
Week 9 (HBL – Fri)	4.2 Remainder and Factor Theorem	WA1: Chp 1, 2, 3 (Curriculum Time)
Week 10	4.3 Cubic expressions, equations and identities	
March Holiday Assignment (Partial Fractions SLS)		
Term 2	Chapter	Assessment
Week 1	4.4 Partial Fractions	
Week 2 (HBL – Fri)	5.1 The Binomial Expansion of $(1 + b)^n$ 5.2 The Binomial Expansion of $(a + b)^n$	
Week 3 (Good Fri)	5.3 Applications of Binomial Theorem in real-world contexts	
Week 4 (HBL – Fri)	6.1 Exponential expressions and equations 6.2 Introduction to Logarithms	

Week 5	6.3 Laws of Logarithms and change of base formula	
Term 2	Chapter	Assessment
Week 6 (Hari Raya Puasa – Mon) (HBL – Fri)	Student Learning Festival week	SLS
Week 7 (Labour Day – Mon)	6.4 Logarithmic and Exponential equations	
Week 8 (HBL – Fri)	6.4 Logarithmic and Exponential equations	WA2: Chp 4, 5, 6.1 to 6.3 (9 May)
Week 9	6.5 Exponential and Logarithmic Functions and graphs	
Week 10 (HBL – Fri)	6.6 Applications of Exponential and Logarithmic Functions	
June Holiday Assignment (Coordinate Geometry SLS)		

Term 3	Chapter	Assessment
Week 1 (Hari Raya Haji – Thur)	7.1 Mid-point of a Line Segment 7.2 Parallel and perpendicular lines 7.3 Equation of straight line	SLS
Week 2 (Youth Day – Mon)	7.4 Areas of rectilinear figures	
Week 3	7.5 Equations of Circles	
Week 4	7.5 Equations of Circles	
Week 5 (HBL 25-27 Jul)	9.1 Trigonometric Ratios of acute angles and special angles	
Week 6	9.2 Trigonometric Ratios of general angles	
Week 7 (National Day –Wed, School Holiday – Thur)	9.3 Trigonometric functions and graphs	
Week 8	8.1 Why study Linear Law	
Week 9	8.2 Converting non-linear equation into linear form 8.3 Converting linear equation into non-linear form	
Week 10 (Teachers' Day Celebration-Thurs, Teachers' Day-Fri)	8.4 Applications of Linear Law	WA3: Chp 6.4 - 6.6, 7, 9 (29 Aug)

September Holiday Assignment (Past Year paper)

Term 4	Chapter	Assessment
Week 1	10.1 Trigonometric equations	
Week 2	Revision	Timed Pract
Week 3	Revision End-of-Year Exam (25 to 26 Sep)	
Week 4-5	End-of-Year Examination (2 to 9 Oct)	
Week 6	Script Checking (12 to 17 Oct) and Review of Exam Papers	
Week 7	Post-Exam Programmes	