

YISHUN SECONDARY SCHOOL
ADDITIONAL MATHEMATICS
SECONDARY 3 NORMAL ACADEMIC 2020

Mathematics Curriculum		Key Programmes
In line with the requirements of the A Mathematics Syllabus, the teaching of A Math at YSS focuses on developing thinking, reasoning and problem-solving skills using Math Modelling, investigation, making conjectures, proofs and making connections among mathematical concepts.		
Term 1	Chapter 1	Assessment
Week 0	1.1 Quadratic functions of the form $y = a(x - p)(x - q)$	
Week 1	1.2 Quadratic functions of the form $y = a(x - h)^2 + k$	
Week 2	1.3 Conditions for quadratic curve to lie completely above or below x-axis 1.4 Quadratic functions in real-world contexts	Use of Desmos
Week 3	2.1 Solving quadratic equations by completing the square 2.2 Solving quadratic equations using Quadratic formula	
Week 4 (CNY-Mon, Tue)	2.3 Solving linear and non-linear simultaneous equations	Use of Desmos
Week 5	2.4 Solving quadratic inequalities	
Week 6	3.1 Surds 3.2 Simplifying expressions involving surds	SLS
Week 7	3.3 Solving equations involving surds	
Week 8	Revision for WA	
Week 9	4.1 Polynomials	WA1 (50 min) Chapter 1 to 3
Week 10	4.2 Remainder and Factor Theorem	
March Holiday Assignment		
Term 2	Learning Experiences (chapter, activity)	Learning Outcomes & Assessment
Week 1	4.3 Cubic expressions, equations and identities	
Week 2	4.4 Partial Fractions	
Week 3 (Good Fri-Fri)	7.1 Mid-point of a Line Segment 7.2 Parallel and perpendicular lines	Exploration through Reasoning
Week 4	7.3 Equation of straight line	
Week 5	7.4 Areas of rectilinear figures	

Week 6 (Labour Day-Fri)	7.5 Equations of Circles	
Week 7 (Vesak Day-Thurs)	7.5 Equations of Circles	
Week 8	8.1 Why study Linear Law 8.2 Converting non-linear equation into linear form	WA2 Chapter 4,7
Week 9	8.3 Converting linear equation into non-linear form	
Week 10 (Hari Raya Puasa-Mon)	Elective Modules	
June Assignment		
Term 3	Learning Experiences (chapter, activity)	Learning Outcomes & Assessment
Week 1	8.4 Applications of Linear Law	
Week 2 (Youth Day, Mon)	9.1 Trigonometric Ratios of acute angles and special angles	
Week 3	9.2 Trigonometric Ratios of general angles	
Week 4	9.3 Trigonometric functions and graphs	
Week 5 (Hari Raya Haji-Fri)	10.1 Trigonometric equations	
Week 6	10.2 Trigonometric identities	
Week 7 (National Day-Mon)	10.3 Addition Formulae	
Week 8	10.4 Double Angle Formulae	
Week 9	Revision for WA 10.5 Proving of identities	WA3 (50 min) Chapter 8,9,10.1,10.2
Week 10 (Teachers' Day Celebration-Thurs, Teachers' Day-Fri)	10.6 R-Formula	
September Holiday Assignment		
Term 4	Learning Experiences (chapter, activity)	Learning Outcomes & Assessment
Week 1	Revision	
Week 2	Revision Advance Paper (Thu)	

Week 3 -5	End of Year Examination and Script Checking
Week 6	Headstart Programme