

**YISHUN SECONDARY SCHOOL
MATHEMATICS
SECONDARY 2 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)	Back to school Programme / Target Setting	
	Go through Holiday Assignment	
Week 2	1.1: Equations of Straight Lines	
	1.2: Graphs of Linear Equations in the form, $ax + by = k$	
	1.3: Solving Simultaneous Linear Equations using Graphical Method	
Week 3 (HBL – Fri)	1.4: Solving Simultaneous Linear Equations using Algebraic Methods (Elimination & Substitution)	
	1.5: Applications of Simultaneous Equations in Real-world Contexts	
Week 4 (CNY – Mon, Tue)	2.1: Simple Inequalities	
	2.2: Solving Simple Linear Inequalities	
Week 5 (HBL – Fri)	2.3: Solving Problems involving Linear Inequalities	
	3.1: Addition and Subtraction of Quadratic Expressions	
Week 6	3.2: Expansion of Algebraic Expressions of the form, $(a + b)(c + d)$	
	3.3: Expansion of Quadratic Expressions	
	Revision for WA1	
Week 7 (HBL – Fri)	3.4: Factorisation of Quadratic Expressions	WA1: 1.1 - 3.1 and Sec 1 Algebra
	3.5: Factorisation of Algebraic Expressions into the form, $(a + b)(c + d)$	
Week 8	4.1: Expansion using Special Algebraic Identities	
	4.2: Factorisation using Special Algebraic Identities	
Week 9 (HBL – Fri)	5.1: Solving Quadratic Equations by Factorisation	
Week 10	5.2: Quadratic Functions and Graphs	
March Holiday Assignment		
Term 2	Chapter	
Week 1	5.2: Quadratic Functions and Graphs	
Week 2 (HBL – Fri)	6.1: Algebraic Fractions	
	6.2: Multiplication and Division of Algebraic Fractions	

Week 3 (Good Fri)	6.3: Addition and Subtraction of Algebraic Fractions	
	6.4: Solving Equations involving Algebraic Fractions	
Week 4 (HBL – Fri)	6.5: Manipulation of Algebraic Formulae	
Week 5	7.1: Direct Proportion	
	7.2: Algebraic and Graphical Representations of Direct Proportion	
Week 6 (Hari Raya Puasa off in lieu Mon) (HBL – Fri)	Student Learning Festival	
Week 7 (Labour Day – Mon)	7.3: Other Forms of Direct Proportion	
	7.4: Inverse Proportion	
Week 8 (HBL – Fri)	7.5 Algebraic and Graphical Representation on Inverse Proportion	
	7.6: Other Forms of Inverse Proportion	
	Revision for WA2	
Week 9 (Vesak Day off in lieu Mon)	8.1: Congruent Figures	
	8.2: Similar Figures	WA2: 3.2 - 6.5
Week 10	8.3: Similarity & Enlargement Lesson on Microsoft Excel (Math Department)	
June Holiday Assignment: Statistics Project		
Term 3	Chapter	
Week 1 (Hari Raya Haji - Thur)	13.1 Dot Diagrams	
	13.2 Histograms for ungrouped data	
	13.3 Stem-and-leaf diagrams	
	13.4 Histograms for grouped data	
Week 2 (Youth Day School Holiday – Mon)	14.1 Mean	
	14.2 Median	
	14.3 Mode	
	14.4 Measure of central tendency	
Week 3	9.1: Pythagoras' Theorem	
	9.2: Applications of Pythagoras' Theorem in Real-world Contexts	
Week 4	9.3: Converse of Pythagoras' Theorem	

	10.1: Trigonometric Ratios	
Week 5 (HBL: Tue – Thur)	10.2: Applications of Trigonometric Ratios (Unknown Sides of Right-angled Triangles) Revision for WA3	
Week 6	10.2: Applications of Trigonometric Ratios (Unknown Sides of Right-angled Triangles)	WA3: 7, 8, 9, 13 and 14
	10.3: Applications of Trigonometric Ratios (Unknown Angles in Right-angled Triangles)	
	10.4: Applications of Trigonometric Ratios in Real-world Contexts	
Week 7 (National Day – Wed, School Holiday – Thu)	10.4: Applications of Trigonometric Ratios in Real-world Contexts	
	Recap: Sec 1 Volume of Prism and cylinders	
Week 8	11.1: Volume and Surface Area of Pyramids	
	11.2: Volume and Surface Area of Cones	
Week 9	11.3: Volume and Surface Area of Spheres	
	11.4: Volume and Surface Area of Composite Solids	
Week 10 (Teachers' Day Celebration-Thu, Teachers' Day-Fri)	12.1: Probability Experiment and Sample Space	
	12.2: Probability of Single Events	
September Holiday Assignment		
Term 4	Chapter	
Week 1	12.3: Further Examples of Probability of Single Events	
	12.4: Experimental Approach to Finding Probability	
	Problems in Real-World Contexts	
Week 2	Problems in Real-World Contexts Revision	
Week 3	Revision End-of-Year Exam (25 & 26 Sep)	
Week 4 - 5	End of Year Examination (2 to 9 Oct)	
Week 6	Script Checking and Review of Exam Papers	
Week 7	Post-Exam Programmes	