

ACE Program – Short-Course Outline

SHORT-COURSE TITLE: MATHEMATICS TUTORIALS – YEARS 7 - 12

Course Details: One-on-one or small group support for Mathematics curriculum 7-12

Week/ Date	TUTORIAL TOPICS – Including, but not restricted to:											Venue/ Resources
	YEAR 7	YEAR 8	YEAR 9	YEAR 10		YEAR 11			YEAR 12			
				Adv	Core	A	B	C	A	B	C	
1	FRACTIONS (throughout), DECIMALS AND PERCENTAGES MARK UP AND DISCOUNT Chapter 3, 4 s	Congruence of triangles and quadrilaterals.	Coordinate geometry, Linear Graphs	Coordinate Geometry Chapter 4	Co-ordinate Geometry and Linear Relationships	Data Collection and Presentation I - (Maths Quest Chapter 9) Exploring and understanding Data I – (Maths Quest Ch 12)	Periodic Functions and Applications II Chapter 5	Matrices and Applications II	Financial mathematics- Managing Money 2(ii)	Integration III Chapter 9	Matrices and Applications III (Worksheets)	SLC
2	PERCENTAGE INCREASE, DECREASE, PROFIT AND LOSS Chapter 3, 4	Congruence. Travel Graphs.	Linear Graphs	Coordinate Geometry Chapter 4	Congruence and Similarity	Exploring and understanding Data I – (Maths Quest Ch 12)	Periodic Functions and Applications II	Real and Complex Number Systems II	Financial mathematics- Managing Money 2(ii)	Integration III Chapter 9	Vectors and Applications III (3 dimensional) (Chapter 3)	
3	ANGLES WITHIN TRIANGLES, QUADRILATERALS AND PARALLEL LINES Chapter 8	Cartesian plane. Coordinates in four quadrants. Linear relationships and algebra	Linear Graphs Data	Geometric reasoning Chapter 8	Congruence and Similarity	Exploring and understanding Data I – (Maths Quest Ch 12)	Exponential and log Functions II Rates of Change I Chapter 7	Real and Complex Number Systems II	Financial mathematics- Managing Money 2(ii)	Introduction to Functions IV Chapter 2	Vectors and Applications III (Chapter 3) Calculus III (Chapter 5)	
4	RATIO Chapter 4	Linear relationships Substitution Rule of $y=mx+c$	Data	Geometric reasoning Chapter 8	Probability	Exploring and understanding Data I – (Maths Quest Ch 12)	Rates of Change I Chapter 7&8	Real and Complex Number Systems II	Financial mathematics- Managing Money 2(ii)	Introduction to Functions IV Applied Statistical Analysis III Chapter 13	Calculus III Chapter 5	
5	PERIMETER AND AREA Chapter 6	Linear functions	Data Probability	Quadratics Chapter 9	Probability	Managing Money I(iii) – (Maths Quest Chapter 2	Rates of Change I Chapter 8	Vectors and Applications II	Financial mathematics- Managing Money 2(ii) Introduction to Models for Data II	Applied Statistical Analysis III Chapter 13	Calculus III Chapter 5 Dynamics III	
6	AREA AND VOLUME Chapter 6	Linear functions	Probability	Quadratics Chapter 9	Probability & Revision	Managing Money I(iii) – (Maths Quest Chapter 2	Rates of Change I Chapter 8 Consolidation and Revision	Structures and Patterns II	Introduction to Models for Data II Revision	Optimisation II Worksheets	Dynamics III-Circular Motion (Worksheets and Chapter 12)	
7	INTEGERS Chapter 2	Measurement	Revision	Revision	Revision & Exam	Exploring and understanding Data I – (Maths Quest Ch 11) Revision and Assessment	Revision and assessment	Revision	Revision QCS Test Block Exams	Optimisation II Revision and Block Exams	Revision and QCS tests Block Exams	
8	ALGEBRA INTRODUCTION Chapter 5	Measurement and Pythagoras	Geometry	Non-monic Quadratics Chapter 10	Exam and Simultaneous Equations	Assessment Exploring and understanding Data I – (Maths Quest Ch 11)	Revision and assessment	Revision and Assessment	Block Exams	Block Exams Optimisation II	Block Exams	
9	ALGEBRA – DISTRIBUTIVE LAW Chapter 5	Perimeter and Circles	Geometry	Probability Chapter 11	Simultaneous Equations	Exploring and understanding Data I – (Maths Quest Ch 11)	Rates of Change II Chapter 9	Assessment Dynamics I	Introduction to Models for Data II Student Profiles for Verification	Optimisation II Verification Grades checked	Verification Grade checking	