Turramurra High School - 2021 - Year 8 - Scope and Sequence

Term 1

Factorise algebraic expressions by identifying algebraic factors Apply the distributive law to the expansion of algebraic expressions, including binomials, and collect like terms where appropriate Apply the four operations to simple algebraic fractions with numerical denominators	V	Veek 1			Week	2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Topic 1: Rational Numbers Topic 1: Rational vs Irrational Numbers Topic 2: Right-Angled Triangles (Pythagoras) Topic 3: Algebraic Techniques Topic 3: A		27/1	79/1	1/2	3/2		8/2	15/2	2/22	1/3	8/3	15/3	22/3	29/3
AND THE PROPERTY OF THE PROPER			1	rrational			Topic 1: Rational vs Irra	ational Numbers	Topic 2: Right-Angled	Triangles (Pythagoras)	Topic 3: Algeb	raic Techniques		Techniques
Connect fractions, decimals and percentages and carry out simple conversions Connect fractions, decimals and percentages and carry out simple conversions Investigate and use square roots of perfect square numbers. Investigate the concept of irrational numbers. Investigate the concept of irrational numbers. Investigate the concept of irrational numbers. Investigate the concept of irrational numbers. Investigate the concept of irrational numbers. Investigate the concept of irrational numbers. Investigate the concept of irrational numbers. Factorise algebraic expressions by identifying algebraic factors Apply the distributive law to the expansion of algebraic expressions, including binomials, and collect like terms where appropriate Apply the four operations to simple algebraic fractions with numerical denominators							2WM, MA4 3W	'M			MA4 2WM	, MA4 3WM	¥	
		SD SD			Swimming Carnival TBC	Connect f simple co	ractions, decimals and penversions e and use square roots of	reentages and carry out	to solving simple problem triangles.	s involving right-angled	operations Extend and apply the dist expansion of algebraic ex- Factorise algebraic expre- numerical factors Factorise algebraic expre- algebraic factors Apply the distributive law algebraic expressions, inc collect like terms where a Apply the four operations	ributive law to the pressions by identifying ssions by identifying ssions by identifying to the expansion of luding binomials, and pyropriate to simple algebraic	Alternative Assessment Wee	Grand Friday

Term 2

Г		Week 1 Week 2		Week 2 Week 3		Week 4	Week 5	Week 6	Week 7		Week 8		Week 9	Week 10		
2,01	19/4	26/4	40/4		3/2	10/5	17/5	24/5	31/5	9/2		14/6		21/6		
		Topic 4: Ratio and R	Rates	To	opic 4: Ratio and Rates contniued	Topic 5: Equations			Topic 5: Equations co	ntinued	Topic 6		Percentages and	Financial Mathematics		
		MA4 7NA, MA4 1WM, MA4 2WM, MA4 3WM				MA4 10NA, MA4 11NA, MA4 1WM, MA4 2WM, MA4 3WM			MA4 10NA, MA4 11NA, MA4 1WM, MA4 2WM, MA4 3WM				MA4 5NA, MA4 6NA, MA4 1WM, MA4 2WM, MA4 3WM			
D	Recognise and solve problems involving simple ratios 5. Solve a range of problems involving ratios and rates, wit D. and without the use of digital technologies Investigate, interpret and analyse graphs from authentic data		proteins and rates, with use of digital pretand		Solve simple linear equations Solve linear equations using algebraic techniques and verify solutions by substitution Solve simple quadratic equations	Study Skills and Revis	ion/Semester 1 Exams	Solve simple linear equations usin algebraic techniques and valutions by substitution Solve simple quadratic equ	ng erify		Queens Birthday	quantity as a percen without the use of di Solve problems invo percentages, includi and decreases, with digital technologies investigate and calc Services Tax (GST) of digital technologi Investigate and calc without the use of di Solve problems invo	living the use of ag percentage increases and without the use of allate the Goods and with and without the use es			
	Ī				NAPLAN											

Term 3

	Week 1	w	leek 2	Wee	k 3	We	ek 4	Week 5	Week 6	Week 7	Week 8	Week	9		Week 10
12/7		7/61		7/97		8/2		8/6	16/8	23/8	8/08	6/9		13/9	
	Topic 6: Percenta Financial Mathe continued	matics		Topic 7: Li	near Relati	onships		Topic 8: P	robability		on and Representation /ariable Data				
	A4 5NA, MA4 6NA, MA4 2WM, MA4	1 3WM						MA4 2WM	MA4 1WM, , MA4 3WM	MA4 19SP, MA4 20SP, MA4					
			Create algebraic given value for			them by subst	ituting a	Describe events using lang exclusive 'or' (A or B but or B or both) and 'and'		Investigate techniques for census, sampling and obse	collecting data, including ervation				
				ionships on th chnologies	e Cartesian p	lane, with and	l without the	Represent events in two-w	ay tables and Venn	Explore the practicalities obtaining data through sai investigative processes				ıt Week	
s.			Solve linear equ	uations using g	graphical tecl	nniques		diagrams and solve related	i problems	Identify and investigate is		Camp			essmen
D. D.										data collected from prima Construct and compare a including stem-and-leaf p	Year 8			tive Ass	
										mean, median, mode and interpret these statistics in	range for sets of data and				Alternativ
		Investigate the effect of individual data v including outliers, on the mean and medi Describe and interpret data displays using median and range													
						a displays using mean,									
										Explore the variation of m random samples drawn fro					
			2												

Term 4

		Week 1	Week 2	Week 3	Wee	ek 4	Week 5	Week 6	Week 7	١	Week 8	Week 9	Week 10	Week 11	
01/10	27,412		01/10	18/10	25/10		1/11	3/11	15/11	22/11		29/11	5/12	13/12	
		Topic 9: Data Collection and Representation and Single Variable Data		, T			Topic 10: N	leasurement continued		Topic 11: Properties of Geometric Figures					
ohlic Holiday	N	MA4 195P, MA4 2051 MA4 1WM, MA4 2WM, MA4 3WM	Use formulas to solv circumference Find areas of trapezi Investigate the relaticircles, such as the a formulas to solve promulas to solve promulas to solve promulas to solve promed from combit Choose appropriate volume and convert Develop the formula rectangular and triar in general; use form involving volume	MG, MA4 14MG, MA4 1W MM, MA4 3WM we problems involving itums, rhombuses and kites increa and the radius; use oblems involving area as of prisms and solids nations of prisms units of measurement for from one unit to another as for the volumes of ngular prisms and of prisms ulas to solve problems as of cylinders and solve	Stud	dy Skills and S	Semester 2 Exam	MA4 Use formulas to solve pr Find areas of trapeziums Investigate the relations the area and the radius; to involving area Draw different views of combinations of prisms Choose appropriate unit convert from one unit to Develop the formulas fo triangular prisms and of solve problems involvin	ip between features of circl see formulas to solve proble prisms and solids formed fr sof measurement for volum another r the volumes of rectangular prisms in general; use form	ence es, such as ms om e and and alas to	problems with Define congrue Develop the co Establish some	MA4 17MG, MA4 1V ties of special triangles and appropriate reasoning ence of plane shapes using nditions for congruence of of the properties of quadri solve related numerical pr	transformations triangles laterals using congruent tr	nple numerical	School Holidays (SDDs)
П															

¹ School Photos

² Maths Competition