

Turramurra High School - 2022-Year 9 5.3/5.2+ - Scope and Sequence

Term 1 2022												
Week 1		Week 2		Week 3		Week 4		Week 5		Week 6		
3/1/1	1/2	7/2		14/2	21/2	28/2		7/3	14/3	21/3	28/3	
SDD 2 Year 7, 11, 12 only		Topic 1: Algebraic Techniques and Equations 1 (5.3)		Topic 1: Algebraic Techniques and Equations 1 (5.3)				Topic 2: Measurement 1 (5.2)			Topic 3: Geometry 1	
		MA5.2 1WM, MA5.2 3WM, MA5.2 6NA, MA5.2 8NA, MA5.2 9MG, MA5.2 1WM, MA5.2 3WM, MA5.2 6NA, MA5.2 8NA, MA5.2 9MG		MA5.2 1WM, MA5.2 3WM, MA5.2 6NA, MA5.2 8NA, MA5.3 1WM, MA5.3 5NA, MA5.3 7NA				MA5.1 1WM, MA5.1 2WM, MA5.2 1WM, MA5.2 2WM, MA5.1 8MG, MA5.2 11MG, MA5.2 12MG, MA5.2 8NA			MA5.2 1WM, MA5.2 2WM,	
		Swimming Carnival		<ul style="list-style-type: none"> Apply the four operations to the the simplification of algebraic expressions including those involving fractions and expansions with numerical denominators Perform binomial expansions Solve linear, basic quadratic and cubic equations and linear inequations Solve simple literal equations 				<ul style="list-style-type: none"> Consolidate and build on the concepts from stage 4 of Pythagoras' Theorem, perimeter, area and volume. Calculate and solves problems involving the area of composite figures and the surface area of right prisms and cylinders. Solve problems involving the volume of a range of prisms, cylinders and composite solids. Use significant figures as another method of rounding. Solve equations arising from substitution into formulae and rearranges literal equations. 			<ul style="list-style-type: none"> Establish results for interior and exterior angles of polygons. Apply logic and reasoning to solve simple numerical problems involving plane shapes 	

Term 2 2022												
Week 1		Week 2		Week 3		Week 4		Week 5		Week 6		
25/4	26/4	27/4	2/5	9/5	16/5	23/5		30/5	6/6	13/6	20/6	
Anzac Day S.D.D.		Topic 4: Similarity Geometry 2		Topic 5: Indices and Scientific Notation				Topic 6: Surds			Topic 7: Trigonometry	
		MA5.1 3WM, MA5.1 11MG		MA5.1 1WM, MA5.1 2WM, MA5.1 3WM, MA5.1 5NA, MA5.1 9MG, MA5.2 1WM, MA5.2 3WM, MA5.2 7NA				MA5.3 1WM, MA5.3 2WM, MA5.3 3WM, MA5.3 6NA			MA5.1 1WM, MA5.1 2WM, MA5.1 3WM, MA5.1 10MG, MA5.2 1WM, MA5.2 2WM, MA5.2 11MG	
		Use the enlargement transformation to explain similarity and develop the conditions for triangles to be similar. Solve problems using ratio and scale factors in similar figures. Use the enlargement transformations to explain similarity and to develop the conditions for triangles to be similar		Extend and apply the index laws to variables, using positive-integer indices and the zero index Simplify algebraic products and quotients using index laws Apply index laws to algebraic expressions involving integer indices Express numbers in scientific notation				Define rational and irrational numbers. Perform basic operations with surds and fractional indices			Use similarity to investigate the constancy of the sine, cosine and tangent ratios for a given angle in right-angled triangles Apply trigonometry to solve right-angled triangle problems Solve right-angled triangle problems, including those involving direction and angles of	
				NAPLAN						Queens Birthday		
										Semester 1 Assessment		
										27/6		

Term 3 2022

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
18/7	19/7		25/7	1/8	8/8	15/8	22/8	29/8	5/9	12/9	19/9
		Topic 7: Trigonometry	Topic 8: Linear Relationships			Topic 9: Rates	Topic 10: Simultaneous Equations		Topic 11: Quadratic Factorisation and Algebraic Fractions		
		MA5.1 1WM, MA5.1 2WM, MA5.1 3WM	MA5.1 1WM, MA5.1 3WM, MA5.1 6NA, MA5.2 1WM, MA5.2 3WM, MA5.2 9NA			MA5.2 1WM, MA5.2 2WM, MA5.2 5NA	MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.2 8NA		MA5.3 1WM, MA5.3 5NA		
S. D. D.		Apply trigonometry to solve right-angled triangle problems	Find the midpoint and gradient of a line segment (interval) on the Cartesian plane using a range of strategies, including graphing software			Recognise direct and indirect proportion.	Solve linear simultaneous equations, using algebraic and graphical methods, including using digital technologies.		Factorise monic and non-monic quadratic expressions.		
		Solve right-angled triangle problems, including those involving direction and angles of elevation and depression	Find the distance between two points located on the Cartesian plane using a range of strategies, including graphing software			Solve problems involving direct proportion.			Simplify algebraic fractions, where at least one binomial factorisation needs to be performed.		
			Sketch linear graphs using the coordinates of two points			Explore the relationship between graphs and equations corresponding to simple rate problems.			Multiply and divide algebraic fractions which involve multiple factorisations.		
			Solve problems involving parallel lines						Add and subtract algebraic fractions where a common denominator needs to be found.		
			Interpret and graph linear relationships using the gradient-intercept form of the equation of a straight line								
			Solve problems involving parallel and perpendicular lines								
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Term 4 2022

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11					
10/10	17/10	24/10	31/10	7/11	14/11	21/11	28/11	5/12	12/12	19/12	20/12						
Topic 12: Single Variable Data Analysis				Topic 13: Financial Maths			Topic 13: Financial Maths	Topic 14: Congruency and Other Proofs					Yearly Assessment	Urban Challenge	Year 10 Algebraic Techniques	SDD	School Holidays
MA5.1 1WM, MA5.1 2WM, MA5.1 3WM, MA5.1 12SP, MA5.2 1WM, MA5.2 3WM, MA5.2 15SP, MA5.3 1WM, MA5.3 2WM, MA5.3 3WM, MA5.3 18SP				MA5.1 1WM, MA5.1 2WM, MA5.1 3WM, MA5.1 4NA			MA5.1 1WM, MA5.1 2WM, MA5.1 3WM, MA5.1 4NA	MA5.2 1WM, MA5.2 2WM, MA5.2 3WM, MA5.2 14MG, MA5.3 1WM, MA5.3 2WM, MA5.3 3WM, MA5.3 16MG									
Compare data displays using mean, median and range to describe and interpret numerical data sets in terms of location (centre) and spread. Determine quartiles and interquartile range. Construct and interpret box plots and use them to compare data sets. Compare shapes of box plots to corresponding histograms and dot plots. Investigate reports of surveys in digital media and elsewhere for information on how data was obtained to estimate population means and medians.				Consolidate and extend the concepts involved in applying percentages. Solve problems involving earning money. Solve problems involving simple interest.			Consolidate and extend the concepts involved in applying percentages. Solve problems involving earning money. Solve problems involving simple interest.	Apply logical reasoning to more complex numerical problems involving plane shapes. Construct proofs involving congruent triangles. Prove and apply theorems and properties related to triangles. Extension: Circle Geometry (prove some of the properties of circles using congruency proofs).									

