

## Varsity College Year 11 General Mathematics

# Term 1, 2023

Week	Date	Topics	Assessment		
1	23-27 January Australia Day PH - Thurs	<ul> <li>Unit 1 Topic 3: Linear equations and their graphs Linear equations:</li> <li>Review Algebra (Year 10 Term 3 Ch.4A – 4H) P.219 Chapter Review Questions (2 Lessons and Homework)</li> </ul>			
2	30 Jan – 3 Feb Swimming Carnival - Mon	<ul> <li>Straight-line graphs and their applications:</li> <li>Application of straight-line graphs Ch.4I</li> <li>Solving simultaneous equations – algebraically Ch.4J</li> </ul>			
3	6-10 February	<ul> <li>Solving simultaneous equations – using technology Ch.4K</li> <li>Problem Solving with Simultaneous Equations Ch.4L</li> <li>Piece-wise linear graphs and step graphs:</li> <li>Sketch and interpret piece-wise and step graphs Ch.4N</li> </ul>			
4	13-17 February	<ul> <li>Unit 1 Topic 2: Shape and Measurement Mensuration:</li> <li>Review Perimeter, Area and Volume (Y10 Term 4 Ch.3A – 3G) Page 153 Chapter Review Questions</li> </ul>			
5	20-24 February	<ul> <li>Similar figures and scale factors:</li> <li>Review Similarity and Scaling (Y10 Term 4 Ch.<b>3H – 3J</b>) Page 153 Chapter Review Questions</li> </ul>			
6	27 Feb – 3 Mar	<ul> <li>Unit 1 Topic 1: Consumer arithmetic</li> <li>Applications of rates, percentages and use of spreadsheets:</li> <li>Salaries and wages Ch.1A</li> <li>Overtime, penalty rates and royalties Ch.1B</li> <li>commission and piecework Ch.1C</li> </ul>			
7	6-10 March GIPSA - Wednesday	<ul> <li>Calculate government allowances Ch.1D</li> <li>Unit cost method Ch.1E</li> </ul>			
8	13-17 March	<ul> <li>Currency and exchange rates Ch.1F</li> <li>Percentages and Applications Ch.2A</li> </ul>			
9	20-24 March	<ul> <li>Chapter 5A – Consumer Arithmetic (Personal) Including Problem Solving – 1H and Chapter Review</li> <li>Chapter 5B – Consumer Arithmetic (Loans) Including Problem Solving – 2G and Chapter Review</li> <li>Chapter 5C – Shape and Measurement Including Problem Solving – 3K and Chapter Review</li> <li>Chapter 5D – Linear Equations and their graphs\ Including Problem Solving – 4M and Chapter Review</li> </ul>			
10	27-31 March Cross Country - Thurs	Exam Block	Unit 1 Exam		
School Holidays: Saturday April 1 – Sunday April 16					



### Term 2, 2023

Week	Date	Topics	Assessment
1	17-21 April Athletics Carnival - Wednesday	<ul> <li>Simple Interest Ch.2B</li> <li>Simple Interest (rearranging formula) Ch.2C</li> </ul>	
2	24-28 April ANZAC Day PH - Tues	<ul> <li>Compound Interest Ch.2D</li> <li>PSMT Handout/Check point</li> </ul>	PSMT hand out L2
3	1-5 May Labour Day PH - Monday GIPSA - Wednesday	<ul> <li>Problem Solving Ch.2G</li> <li>PSMT Check point</li> </ul>	PSMT Draft due L2
4	8-12 May	<ul> <li>Prepare a budget Ch.1G</li> <li>PSMT Check point</li> <li>Inflation Ch.2E</li> </ul>	
5	15-19 May GIPSA - Wednesday	<ul> <li>Unit 2 Topic 1: Applications of trigonometry Applications of trigonometry:</li> <li>Review of basic trigonometry Ch.6A</li> <li>Finding the unknown side Ch.6B</li> <li>Finding an angle Ch.6C</li> </ul>	PSMT Due L1
6	22-26 May GIPSA - Wednesday	<ul> <li>Angles of elevation and depression Ch.6E</li> <li>Bearings and navigation Ch.6F</li> </ul>	
7	29 May – 2 June	<ul> <li>Area of triangle (Heron's Rule) Ch.6G</li> <li>The Sine Rule Ch.6H</li> </ul>	
8	5-9 June Exam Block – Tuesday L1,2 GIPSA - Wednesday	The Cosine Rule Ch.6I	
9	12-16 June	<ul> <li>Unit 2 Topic 3: Univariate data analysis</li> <li>Making sense of data:</li> <li>Review Data from Y10 Term 4 (Ch.9A – 9G)</li> <li>Page 429 Chapter Review Questions</li> </ul>	
10	19-23 June	Exam Block	
	Scl	nool Holidays: Saturday June 24 – Sunday July 9	



# Term 3, 2023

Week	Date	Topics	Assessment			
1	10-14 July	Unit 2 Topic 3: Univariate data analysis Comparing data for a numerical variable across two or more groups:				
		<ul> <li>Construct and interpret boxplots Ch.9H</li> <li>Compare data across 2 or more data groups Ch.9I</li> </ul>				
2	17-21 July	Unit 2 Topic 2: Algebra and matrices Linear and non-linear relationships:				
		<ul> <li>Substituting values (Linear and Non-Linear) Ch.7A</li> <li>Transposition of equations Ch.7C</li> </ul>				
3	24-28 July	<ul> <li>Constructing a table of values (with 2 variables) Ch.7B (Practice using a spreadsheet)</li> </ul>				
4	31 July – 4 August	Matrices and matrix arithmetic:				
		<ul> <li>The Basics of a matrix Ch.8A</li> <li>Using matrices in practical situations Ch.8B</li> <li>Adding and subtracting matrices Ch.8C</li> <li>Scalar multiplication Ch.8D</li> </ul>				
5	7-11 August	<ul> <li>Matrix multiplication and power of a matrix Ch.8E</li> <li>Problem-solving and modelling with matrices Ch.8F</li> </ul>				
6	14-18 August	<ul> <li>Communications and connections Ch.8G</li> <li>Further applications and problem-solving tasks Ch.8H</li> </ul>				
		End of Unit 2				
7	21-25 August	PSMT review and preparation for Unit 3 PSMT				
8	28 August – 1 Sept.	Unit 2 Revision:				
		<ul> <li>Chapter 10A – Applications of Trigonometry Including Problem Solving – 6J and Chapter Review</li> <li>Chapter 10B – Linear and non-linear relationships Including Chapter Review</li> </ul>				
9	4-8 September	<ul> <li>Unit 2 Revision:         <ul> <li>Chapter 10C – Matrices and matrix arithmetic Including Problem Solving – 8H and Chapter Review</li> <li>Chapter 10D – Univariate Data Analysis Including Problem Solving – 9J and Chapter Review</li> </ul> </li> </ul>				
10	11-15 September	Exam	Unit 2 exam			
	School Holidays: Saturday September 16 – Monday October 2					



### Term 4, 2023

Week	Date	Topics	Assessment			
1	2-6 October Queen's Birthday PH - Mon	<ul> <li>Unit 3 Topic 1: Bivariate data analysis</li> <li>Identifying and describing associations between two numerical variables:</li> <li>Review types of data Ch.1A</li> </ul>				
		<ul> <li>Two way tables Ch.1B (1A and 1B – 1 lesson)</li> <li>Displaying bivariate data - The scatterplot Ch.1C</li> </ul>				
2	9-13 October	<ul> <li>Interpreting a scatterplot Ch.1D</li> <li>A measure of strength – the correlation coefficient Ch.1E</li> <li>The coefficient of determination Ch.1F</li> </ul>				
3	16-20 October	<ul> <li>Fitting a linear model to numerical data:</li> <li>Fitting a linear model Ch.2A</li> <li>Least squares regression line Ch.2B</li> <li>PSMT review and preparation for Unit 3 PSMT</li> </ul>	PSMT (IA1) hand out Lesson 2			
4	23-27 October	Association and Causation Ch.2C	Checkpoint 1			
5	30 Oct – 3 Nov	<ul> <li>Unit 3 Topic 2: Time series analysis</li> <li>Describing and interpreting patterns in time series data:</li> <li>Time series data Ch.3A</li> <li>Describe time series plots Ch.3B</li> </ul>	Checkpoint 2			
6	6-10 November	Smoothing a time series using moving means Ch.3C	Checkpoint 3			
7	13-17 November	<ul> <li>Seasonal Indices Ch.3D</li> <li>Fitting a trend line and forecasting Ch.3E</li> <li>Final Week Year 11</li> </ul>	PSMT (IA1) due start of Lesson 2			
8	20-24 November	Exam Block				
	School Holidays: Saturday November 25 – Sunday January 21, 2024					