Varsity College
Year 9 Mathematics – Semester 2, 2024

Week	Date	Topics	Assessment
1	**8-12 July** Athletics Carnival - Wed	**Surface Area and Volume** • Calculate the surface area of right prisms, cylinders and spheres • Calculate surface area of composite prisms	
2	**15-19 July**	**Surface Area and Volume** • Calculate the volume of right prisms, cylinders and spheres • Calculate volume of composite prisms	
3	**22-26 July** GC24 - Thursday	**Problem Solving and Modelling Task (formative)**	
4	**29 Jul- 2 Aug**	**Problem Solving and Modelling Task (formative)**	
5	**5-9 August**	**Probability** • Review calculating theoretical probability • Calculate experimental probabilities from given data • Determine the expected number of outcomes	
6	**12-16 August** GC24 Finals – Wed.	**Probability** • Use data to estimate probability of events involving "and", inclusive "or" and exclusive "or"	
7	**19-23 August**	**Probability** • Use array tables to determine probabilities for two step experiments • List all outcomes and determine probabilities for compound events using tree diagrams (with and without replacement)	
8	**26-30 August**	**Revision**	
9	**2-6 September**	**Revision**	**Exam Lesson 3**
10	**9-13 September**	**Probability Experiment** • Design and conduct chance experiments and simulations	

School holidays: Saturday September 14 – Sunday September 29

Week	Date	Topics	Assessment
1	**30 Sept – 4 Oct**	**Trigonometry** • Labelling and identifying right angled triangles • Introduce SOH CAH TOA • Apply SOH CAH TOA in right-angle triangles to determine unknown side (numerator of ratio)	
2	**7-11 October** King's B'day PH - Monday	**Trigonometry** • Apply SOH CAH TOA in right-angle triangles to determine unknown side (denominator of ratio) • Apply SOH CAH TOA in right-angle triangles to determine unknown angle	
3	**14-18 October**	**Trigonometry** • Review Similarity and scale factor • Apply trigonometry to problems involving Similarity	
4	**21 - 25 October**	**Coordinate Geometry** • Recall the rule for a linear function ($y = mx + c$) • Use digital tools to investigate gradient relationships for parallel and perpendicular lines • Determine the gradient of a line between 2 points	
5	**28 Oct – 1 Nov**	**Coordinate Geometry** • Determine the midpoint of a line segment between 2 points • Apply Pythagoras theorem to calculate the distance between 2 points	
6	**4-8 November**	**Coordinate Geometry** • Model and solve problems involving practical and financial contexts • Interpolate and extrapolate data points from linear models	
7	**11-15 November**	**Revision**	
8	**18-22 November**	**Revision**	**Exam Lesson 2**
9	**25-29 November**	**Consolidating Activities** • Plotting Coordinate points	
10	**2-6 December**	**Alternative Program**	
11	**9-13 December**	**Supervision only week**	

School holidays: Saturday December 14 – Tuesday January 28