

Varsity College
Year 10 Specialist Mathematics – Semester 2, 2024

Week	Date	Topics	Assessment
1	8-12 July Athletics Carnival Wed.	Number Systems: <ul style="list-style-type: none"> • Number classification and set notation • Rational and Irrational numbers 	
2	15-19 July	<ul style="list-style-type: none"> • Operations with surds: multiplication and division using conjugates 	
3	22-26 July GC24 - Thursday	<ul style="list-style-type: none"> • Methods of proof (including proof notation) • Direct proof • Proof by contrapositive 	
4	29 Jul- 2 Aug	<ul style="list-style-type: none"> • Proof by contradiction 	
5	5-9 August	Matrices: <ul style="list-style-type: none"> • Introduction to matrices – matrix definition and notation • Operations with matrices (+, −, × by scalar) 	
6	12-16 August GC24 Finals – Wed.	<ul style="list-style-type: none"> • Operations with matrices (×) • Understanding the multiplicative identity and inverse • Solving matrix equations 	
7	19-23 August	Geometric Properties and Chord Theorems: <ul style="list-style-type: none"> • Geometry review: basic properties, congruency and angle facts 	
8	26-30 August	<ul style="list-style-type: none"> • Chord Theorems 	
9	2-6 September	<ul style="list-style-type: none"> • Revision 	EXAM Lesson 3
10	9-13 September	Vectors: <ul style="list-style-type: none"> • Properties and notation of vectors • Cartesian and polar form 	
School holidays: Saturday September 14 – Sunday September 29			
1	30 Sept – 4 Oct	<ul style="list-style-type: none"> • Triangles rules with vectors 	
2	7-11 October King's B'day PH - Monday	<ul style="list-style-type: none"> • Using vectors in geometric proof 	
3	14-18 October	Complex Numbers: <ul style="list-style-type: none"> • Introduction to complex numbers, defining i • Complex solutions of quadratics 	
4	21 - 25 October	<ul style="list-style-type: none"> • Operations with complex numbers (+, −, × by scalar and ×) • Complex conjugates and division of complex numbers • Complex numbers in polar form 	
5	28 Oct – 1 Nov	<ul style="list-style-type: none"> • Complex numbers in polar form • Proofs involving complex numbers 	
6	4-8 November	Algebraic Fraction Decomposition <ul style="list-style-type: none"> • Decompose algebraic fractions with linear factors • Decompose algebraic fractions with repeated linear factors 	
7	11-15 November	<ul style="list-style-type: none"> • Revision 	
8	18-22 November	EXAM BLOCK	EXAM
School holidays: Saturday November 23 – Monday January 27			