

MATHEMATICS - GRADE 12 – 2024

TOPIC	ASSESSMENT STANDARDS	PORTFOLIO ASSESSMENT TASKS
PHASE 1 (13 November 2023 – 8 March 2024)		
Statistics	Bivariate data and regression; correlation	Task 1: Investigation: Inverses 29 Jan– 2 Feb Task 2: Control Test Sequences & Series 21 Feb – 5 March Task 3: Assignment: Trig 11 – 15 Mar
Number patterns	Arithmetic Series	
	Geometric Series	
	Infinite Geometric series; Sigma notation	
Algebra	Inverses	
Trigonometry	Compound Angle and Double Angle formulae	
	Identities and Equations	
Financial Mathematics	Calculation of time period	
	Future value annuity formula	
	Present value annuity formula	
Analytical Geometry	Equation of a circle (any centre)	
	Equations of tangents to circles	
PHASE 2 (11 March 2024 – 31 May 2024)		
Polynomials	Remainder and Factor theorem	Task 5 Part A Controlled Test: Calculus 22 – 26 April Task 4 June Exams 13 – 31 May
Calculus	Calculus; limits and first principles	
	Rules for differentiation	
	Sketch graphs of cubic functions	
	Applications to problems – max / min; rates of change	
Trigonometry	Functions $y = \sin k(x + p) + q$; $y = \cos k(x + p) + q$ and $y = \tan k(x + p) + q$	
	Solution of problems in 2 and 3 dimensions	
PHASE 3 (3 June 2024 – 18 October 2024)		
Euclidean Geometry	Proportional Intercept theorems	Task 5 Part B Controlled Test B: Euclidean Geom. 29 July – 2 Aug Task 6 Trials Exam 19 Aug – 6 Sept
	Similar triangles	
	Proof of the theorem of Pythagoras	
Probability	Revise Dependent and Independent events	
	Revise Venn Diagrams and other techniques	
	Fundamental counting principle	
Functions	Definition of a function	
	Inverses of functions	
	Logarithmic function	
Consolidation	Revision	