

## MATHEMATICS - GRADE 11 2024

TOPIC	ASSESSMENT STANDARDS	PORTFOLIO ASSESSMENT TASKS	
<b>PHASE 1 (13 November 2023 – 8 March 2024)</b>			
<b>Statistics</b>	Measurement	<b>Task 1:</b> Investigation: Number patterns 5 – 9 Feb  <b>Task 2:</b> Control Test: Stats & Algebraic Equations 21 Feb – 5 Mar  <b>Task 3:</b> Assignment: Analytical Geom 11– 15 Mar	
	Graphical representation: Ogive curves		
	Mean and Standard deviation		
<b>Algebra</b>	Solve quadratic equations and Inequalities		
	Algebraic expressions: completing the square		
	Solve equations in 2 unknowns, one quadratic		
	Nature of Roots		
<b>Number patterns</b>	Linear and quadratic number patterns		
<b>Analytical Geometry</b>	Parallel, perpendicular, inclination		
	Equation of a straight line		
<b>Functions</b>	Quadratic Function: $f(x) = ax^2 + bx + c$		
<b>PHASE 2 (11 March 2024 – 31 May 2024)</b>			
<b>Functions</b>	Investigate characteristics of the functions: $f(x) = a(x + p)^2 + q$ and $f(x) = \frac{a}{x + p} + q$	<b>Task 4:</b> Control Test A: Functions 22 – 26 Apr Control Test B: Trigonometry 13 – 17 May  <b>Task 5:</b> June Exams 13 – 31 May	
	Average gradient between points on a curve		
<b>Algebra: Number and Exponent</b>	Exponents, Surds		
	Characteristics of the function $f(x) = a.b^{x+p} + q$		
<b>Trigonometry</b>	CAST, Reductions		
	Identities quotient and squares formulae		
<b>PHASE 3 (3 June 2024 – 8 November 2024)</b>			
<b>Trigonometry</b>	Trigonometric equations and general solution		<b>Task 6</b> Control Test A: Trig functions 5 – 8 Aug Control Test B: Finance 12 – 16 Aug  <b>Task 7:</b> Control Test: Geometry: Circles 21 Aug – 3 September  <b>Task 8:</b> October Exam 21 Oct – 8 Nov
<b>Trig functions</b>	Functions : $y = \sin k(x + p)$ ; $y = \cos k(x + p)$ and $y = \tan k(x + p)$		
<b>Finance</b>	Simple and compound decay		
	Rate and periods in compound growth and decay		
<b>Euclidean Geometry</b>	Circle theorems		
	Solving riders		
<b>Probability</b>	Revision of Grade 10 rules		
	Venn diagrams and Tree diagrams		
<b>Trigonometry</b>	Sine, cosine and area rules		
	Solution of right-angled and oblique triangles		