

MATHEMATICS - GRADE 11 2020

TOPIC	ASSESSMENT STANDARDS	PORTFOLIO ASSESSMENT TASKS
PHASE 1 (5 November 2019 – 20 March 2020)		
Statistics	Graphical representations	<p>☞ Task 1 Dec Controlled Test Dec 2019</p> <p>☞ Task 2 Investigation: Projectile motion 3 – 7 Feb</p> <p>☞ Task 3 Controlled Test 9 – 20 March</p>
	Ogive curves	
	Standard deviation	
Algebra	Solve quadratic equations	
	Solve quadratic inequalities	
	Algebraic expressions: completing the square	
	Solve equations in 2 unknowns, one quadratic	
	Nature of roots	
Functions	Investigate characteristics of the functions: $f(x) = a(x + p)^2 + q$ and $f(x) = \frac{a}{x + p} + q$	
	Average gradient between points on a curve	
Analytical Geometry	Parallel, perpendicular, inclination	
	Equation of a straight line	
PHASE 2 (31 March 2020 – 12 June 2020)		
Euclidean Geometry	Measurement: surface area and volume	<p>☞ Task 4 Assignment: Surface area and volume 20 – 24 April</p>
Trigonometry	Reductions	
	Identities quotient and squares formulae	
	Trigonometric equations and general solution	
Number and Exponent	Rational exponents, surds and error margins	<p>☞ Task 5 June Exams 1 – 12 June</p>
	Characteristics of the function $f(x) = a.b^{x+p} + q$	
Number patterns	Linear and quadratic number patterns	
PHASE 3 (7 July 2020 – 30 October 2020)		
Euclidean Geometry	Circle theorems	<p>☞ Task 6 Assignment: Circle Geom. 24 – 28 Aug</p>
	Solving riders	
Finance	Simple and compound decay	<p>☞ Task 7 Controlled Test 7 – 11 Sept</p> <p>☞ Task 8 October Exam 19 – 30 Oct</p>
	Rate and periods in compound growth and decay	
Trigonometry	Functions : $y = \sin k(x + p)$; $y = \cos k(x + p)$ and $y = \tan k(x + p)$	
	Sine, cosine and area rules	
	Solution of right-angled and oblique triangles	
Probability	Revision of rules	
	Venn diagrams and Tree diagrams	