

MATHEMATICS - GRADE 9 2020

TOPIC	ASSESSMENT STANDARDS	PORTFOLIO ASSESSMENT TASKS
PHASE 1 (5 November 2019 – 20 March 2020)		
Data Handling	Collection, Central tendencies, graphical representations and analysis	<p>Task 1 Dec Controlled Test Dec 2019</p> <p>Task 2 Assignment: Number patterns 10 – 14 Feb</p> <p>Task 3 Controlled Test 9 – 20 March</p>
Algebra	Binomial products	
	Equations and word problems	
	Factorisation: common factor, difference of two squares, trinomials	
	Exponents: laws and definitions	
Relationships and modelling	Investigate patterns and functions in Algebra	
	Recording and representation: flow charts and tables	
	Solution as a rule or formula	
Numbers, Operations and Relationships	Rational numbers: representation and use	
	Scientific notation	
	Using exponential laws in calculations	
Algebraic methods	Equations: algebraic solution, brackets and fractions, substitution	
	Using factorisation to simplify fractions	
PHASE 2 (31 March 2020 – 12 June 2020)		
Theorem of Pythagoras	Finding unknown lengths in figures and solids	<p>Task 4 Investigation: Straight line 20 – 24 April</p>
	Application to irrational numbers: surd form and irrational approximation	
Time, distance and speed	Solution of problems with regard to ratio and rate	<p>Task 5 Revision assignment: 4 – 8 May</p>
	Proportion (direct and indirect) and related graphs	
Graphs and interpretations	Cartesian plane and coordinates	<p>Task 6 June Exams 1 – 12 June</p>
	Drawing graphs using tables and rules	
	Straight line graphs: drawing, features (gradient, y-intercept), finding rule from graph and table	
Transformations	Review of concepts: translation, rotation and reflection	<p>Task 7 Investigation – Measurement 13 – 17 July</p> <p>Task 8 Project – Congruency 3 – 7 Aug</p> <p>Task 9 Revision assignment: 11 – 14 Aug</p> <p>Task 10 Controlled Test 31 Aug – 4 Sept</p> <p>Task 11 October Exam 19 – 30 Oct</p>
	Translations with coordinates	
	Reflections with axes	
	Rotations about the origin	
PHASE 3 (7 July 2020 – 30 October 2020)		
Geometric properties	Congruency: 4 axioms, simple proofs and deductions	<p>Task 7 Investigation – Measurement 13 – 17 July</p>
	Similarity: fundamental basics	
	Classification of quadrilaterals	
Finance	Simple and compound interest, Hire purchase	Task 8
Probability	Listing possible outcomes	Project – Congruency 3 – 7 Aug
	Probability of an outcome by definition	Task 9 Revision assignment: 11 – 14 Aug
	Relative frequency of an outcome	Task 10 Controlled Test 31 Aug – 4 Sept
	Comparing relative frequency to theoretical probability	Task 11 October Exam 19 – 30 Oct
	Compound events : tree diagrams	