#### **REVISION:**

**Grade 12 Mathematics** 

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PAPER 1

# <u>Algebra</u>

R1001	Factorization	
R1002	Equations	
R1003	Algebraic Fractions	
R2001	Exponents	
R2002	Surds	
R2003	Completing the Square	
R2004	Equations	
R2005	Inequalities	
R2006	Nature of Roots	
R3001	Logarithms	
R3002	Cubic Polynomials	
R3003	Rem. and Factor Theorem	
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# Qumber Qatterns

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R2601	Arithmetic Sequences		
R2602	Quadratic Sequences		
R3601	Geometric Sequences		
R3602	Arithmetic Series		
R3603	Geometric Series		
R3604	Infinite Geometric Series		
R3605	Sigma Notation		
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## **Dunctions**

R2201	Introduction and Properties
R2202	Finding the Equation
R2203	Finding Intercepts
R2204	Asymptotes
R2205	Turning Point
R2206	Sketching Graphs
R2207	Domain and Range
R2208	Axis of Symmetry
R2209	Continuity
R2210	Increasing and Decreasing
R2211	Average Gradient
R2212	Reflection and Translation
	Graphical Interpretation:
R2213	GI: Length of Lines
R2214	GI: Inequalities
R2215	GI: Nature of Roots
R3201	Horizontal and Vertical Line Test
R3202	Inverses
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# <u>Oalculus</u>

R3401	Limits
R3402	Gradient
R3403	Differentiation: 1st principle
R3404	Differentiation: Rules
R3405	Tangent to Curve
R3406	Graphs: Properties
R3407	Graphs: Sketching
R3408	Graphs: Determine Equation
R3409	Practical Application
R3410	Optimization
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### **Dinance**

R1701	Simple Interest		
R1702	Hire Purchase		
R1703	Compound Interest		
R2701	Simple Decay		
R2702	Compound Decay		
R2703	Compound Intervals		
R2704	Nom. and Eff. interest rates		
R2705	Time Lines		
R3701	Future Value Annuities		
R3702	Payments beginning of period		
R3703	Sinking Funds		
R3704	Present Value Annuities		
R3705	Balance on Loan		
R3706	Time Period		
R3707	Delayed payments		
Work tl	hrough Past Paper questions on th	is t	opic

# (Available 2024)

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R1901	General overview on basics		
R2901	Dependent and Ind. events		
R2902	Venn Diagrams		
R2903	Tree Diagrams		
R2904	Contingency Tables		
R3901	Fund. Counting Principle		
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PAPER 2

Ouclidian Geometry

R8101	Lines, Angles and Triangles		
R8102	Theorem of Pythagoras		
R9101	Quadrilaterals		
R1101	Quadrilaterals (Proving)		
R9102	Similarity and Congruency		
R9103	Angles of polygons		
R1102	Midpoint Theorem		
R1103	Summative Exercises		
R2101	Theorem one to two		
R2102	Theorem three to five		
R2103	Theorem six to seven		
R2104	Summary (Euclidian Theorems)		
R3101	Proportionality Theorem		
R3102	Similar Triangles		
R3103	Pythagoras' Theorem		
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<u>**Drigonometry**</u>

R1301	Ratios		
R1302	Quadrants (CAST)		
R1303	Special Angles		
R2301	Reduction Formulas		
R2302	Identities		
R2303	Equations		
R3301	Compound Angles		
R3302	Double Angles		
R3303	Expressions in terms of variable		
R2304	2D Trigonometry		
R3304	3D Trigonometry		
R2305	Trigonometric Functions		
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<u>Statistics</u>

(Available 2024)

	(Available 2024)		
R1801	Central Tendency and Dispersion		
R1802	Tables and Diagrams		
R2801	Histograms and Frequency Polygons		
R2802	Ogives		
R2803	Variance and Standard Deviation		
R2804	Data Symmetry and Outliers		
R3801	Bivariate Data		
R3802	Least Squares Regression Line		
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Palytical Peometry

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R1501	Average Gradient		
R1502	Distance Formula		
R1503	Midpoint Formula		
R1504	Straight Lines		
R1505	Quadrilaterals		
R2501	Angle of Inclination		
R3501	Equation of a Circle		
R3502	Intersection of Circles		
R3503	Tangents to Circle		
R3504	Straight lines and Circles		
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