

SECONDARY SCHOOL STANDARD CURRICULUM
Mathematics Form 1

NUMBERS AND OPERATIONS	RATIONAL NUMBERS	Integers
		Basic arithmetic operations involving integers
		Positive and negative fractions
		Positive and negative decimals
		Rational numbers
	FACTORS AND MULTIPLES	Factors, prime factors and Highest Common Factor (HCF)
		Multiples, common multiples and Lowest Common Multiple (LCM)
	SQUARES, SQUARE ROOTS, CUBES AND CUBE ROOTS	Squares and square roots
		Cubes and cube roots
RELATIONSHIP AND ALGEBRA	RATIOS, RATES AND PROPORTIONS	Ratios, rates and proportions
		Relationship between ratios, rates and proportions with percentages, fractions and decimals
	ALGEBRAIC EXPRESSIONS	Variables and algebraic expressions
		Algebraic expressions involving basic arithmetic operations
	LINEAR EQUATIONS	Linear equations in one variable
		Linear equations in two variables
		Simultaneous linear equations in two variables
	LINEAR INEQUALITIES	Inequalities
		Linear inequalities in one variable
MEASUREMENT AND GEOMETRY	LINES AND ANGLES	Lines and angles
		Angles related to intersecting lines
		Angles related to parallel lines and transversals
	BASIC POLYGONS	Polygons
		Properties of triangles and the interior and exterior angles of triangles
		Properties of quadrilaterals and the interior and exterior angles of quadrilaterals
	PERIMETER AND AREA	Perimeter
		Area of triangles, parallelograms, kites and trapeziums
		Relationship between perimeter and area
	THE PYTHAGORAS THEOREM	The Pythagoras Theorem
		The converse of Pythagoras Theorem

DISCRETE MATHEMATICS	INTRODUCTION TO SET	Set
		Venn diagrams, universal sets, complement of a set and subsets
STATISTICS AND PROBABILITY	DATA HANDLING	Data collection, organization and representation process, and interpretation of data representation

SECONDARY SCHOOL STANDARD CURRICULUM
Mathematics Form 2

NUMBER AND OPERATIONS	PATTERNS AND SEQUENCES	Patterns
		Sequences
		Patterns and Sequences
RELATIONSHIP AND ALGEBRA	FACTORISATION AND ALGEBRAIC FRACTIONS	Expansion
		Factorisation
		Algebraic Expressions and Laws of Basic Arithmetic Operations
	ALGEBRAIC FORMULAE	Algebraic Formulae
	COORDINATES	Distance in the Cartesian Coordinate System
		Midpoint in the Cartesian Coordinate System
		The Cartesian Coordinate System
	GRAPHS OF FUNCTIONS	Functions
		Graphs of Functions
	SPEED AND ACCELERATION	Speed
		Acceleration
	GRADIENT OF A STRAIGHT LINE	Gradient
MEASUREMENT AND GEOMETRY	POLYGONS	Regular Polygons
		Interior Angles and Exterior Angles of Polygons
	CIRCLES	Properties of Circles
		Symmetrical Properties of Chords
		Circumference and Area of a Circle
	THREE-DIMENSIONAL GEOMETRICAL SHAPES	Geometric Properties of Three-Dimensional Shapes
		Nets of Three Dimensional Shapes
		Surface Area of Three Dimensional Shapes
		Volume of Three Dimensional Shapes
	ISOMETRIC TRANSFORMATIONS	Transformations
		Translation
		Reflection
		Rotation
		Translation, Reflection and Rotation as an Isometry
		Rotational Symmetry

STATISTICS AND PROBABILITY	MEASURES OF CENTRAL TENDENCIES	Measures of Central Tendencies
	SIMPLE PROBABILITY	Experimental Probability
		Probability Theory involving Equally Likely Outcomes
		Probability of the Complement of an Event
		Simple Probability

SECONDARY SCHOOL STANDARD CURRICULUM
Mathematics Form 3

NUMBER AND OPERATIONS	INDICES	Index Notation
		Law of Indices
	STANDARD FORM	Significant Figures
		Standard Form
	CONSUMER MATHEMATICS: SAVINGS AND INVESTMENTS, CREDIT AND DEBT	Savings and Investments
		Credit and Debt Management
MEASUREMENT AND GEOMETRY	SCALE DRAWINGS	Scale Drawings
	TRIGONOMETRIC RATIOS	Sine, Cosine and Tangent of Acute Angles in Right-angled Triangles
	ANGLES AND TANGENTS OF CIRCLES	Angle at the Circumference and Central Angle Subtended by an Arc
		Cyclic Quadrilaterals
		Tangents to Circles
		Angles and Tangents of Circles
	PLANS AND ELEVATIONS	Orthogonal Projections
		Plans and Elevations
	LOCI IN TWO DIMENSIONS	Loci
		Loci in Two Dimensions
RELATIONSHIP AND ALGEBRA	STRAIGHT LINES	Straight Lines

SECONDARY SCHOOL STANDARD CURRICULUM
Mathematics Form 4

RELATIONSHIP AND ALGEBRA	QUADRATIC FUNCTIONS AND EQUATIONS IN ONE VARIABLE	Quadratic Functions and Equations
	LINEAR INEQUALITIES IN TWO VARIABLES	Linear Inequalities in Two Variables
		Systems of Linear Inequalities in Two Variables
	GRAPHS OF MOTION	Distance-Time Graphs
		Speed-Time Graphs
NUMBER AND OPERATIONS	NUMBER BASES	Number Bases
	CONSUMER MATHEMATICS: FINANCIAL MANAGEMENT	Financial Planning and Management
DISCRETE MATHEMATICS	LOGICAL REASONING	Statement
		Argument
	OPERATIONS ON SETS	Intersection of Sets
		Union of Sets
		Combined Operations on Sets
	NETWORK IN GRAPH THEORY	Network
STATISTICS AND PROBABILITY	MEASURES OF DISPERSION FOR UNGROUPED DATA	Dispersion
		Measures of Dispersion
	PROBABILITY OF COMBINED EVENTS	Combined Events
		Dependent Events and Independent Events
		Mutually Exclusive Events and Non-Mutually Exclusive Events
		Application of Probability of Combined Events

SECONDARY SCHOOL STANDARD CURRICULUM
Mathematics Form 5

RELATIONSHIP AND ALGEBRA	VARIATION	Direct Variation
		Inverse Variation
		Combined variation
	MATRICES	Matrices
		Basic Operation on Matrices
	MATHEMATICAL MODELING	Mathematical Modeling
NUMBERS AND OPERATION	CONSUMER MATHEMATICS: INSURANCE	Risk and insurance coverage
	CONSUMER MATHEMATICS : TAXATION	Taxation
MEASUREMENT AND GEOMETRY	CONGRUENCY, ENLARGEMENT AND COMBINED TRANSFORMATIONS	Congruency
		Enlargement
		Combined Transformation
		Tessellation
	RATIOS AND GRAPHS OF TRIGONOMETRIC FUNCTIONS	The value of sine, cosine and tangent for angle θ , $0^\circ \leq \theta \leq 360^\circ$
		The graphs of sine, cosine and tangent functions
STATISTICS AND PROBABILITY	MEASURES OF DISPERSION FOR GROUPED DATA	Dispersion
		Measures of dispersion