

Math Analysis & Approaches SL Year 1 Subject Group Overview

Unit Name	Topic 1: Numbers & Algebra	Topic 2: Functions	Topic 4: Probability & Statistics	Topic 3: Geometry & Trigonometry
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Time Frame	6 Weeks	8 Weeks	8 Weeks	6 Weeks
Standards/ IB Topics	Topic 1: SL 1.1 – 1.9	Topic 2: SL 2.1 – 2.11	Topic 4: SL 4.1 – 4.12	Topic 3: SL 3.1 – 3. 8
Content Specific Information	1.1 Operations with numbers in scientific notation form 1.2 Arithmetic Sequences 1.3 Geometric Sequences 1.4 Financial Applications of Geometric Sequences 1.5 Laws of Exponents 1.6 Algebraic Proofs 1.7 Properties of Logs 1.8 Sum of Geometric Sequences 1.9 Binomial Theorem	2.1 Linear Equations, Parallel, Perpendicular Lines 2.2 Domain, Range, Inverses 2.3 Graphs of Functions 2.4 Key features of Graphs 2.5 Composite functions 2.6 Quadratic Functions 2.7 Quadratic Equations & Inequalities, discriminant 2.8 Rational Functions & Equations 2.9 Exponential & Log Functions 2.10 Solving all equations 2.11 Transformations of Graphs	4.1 Population, samples, outliers 4.2 Presentation of data, box-whisker plots, histograms 4.3 Measures of central tendency & dispersion, 4.4, 4.10 Linear Regression 4.5 Probability of Events 4.6, 4.11 Conditional, independent, dependent probability 4.7 Expected Value 4.8 Binomial distribution 4.9, 4.12 Normal distribution	3.1 Distance, midpoint, volume 3.2 Sine, Cosine, Tangent Ratios, Sine Rule, Cosine Rule & Area of a Triangle 3.3 SOH CAH TOA applications 3.4 Unit Circle 3.5 Sine, Cosine, Tangent in terms of unit circle, radians 3.6 Trig Identities 3.7 Circular Functions 3.8 Solving Trig Equations
Common Assessments / Major Projects	Common Homework Quizzes Common Formative Assessments Common Summative Assessment	Common Homework Quizzes Common Formative Assessments Common Summative Assessment	Common Homework Quizzes Common Formative Assessments Common Summative Assessment	Common Homework Quizzes Common Formative Assessments Common Summative Assessment
Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources	My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources

Math Analysis & Approaches Year 1 - MHS Subject Group Overview

Unit Name	Internal Assessment	Reassessments/Final Exam
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Time Frame	3 Weeks	2 Weeks
Standards/ IB Topics	Students will work to complete their Math Exploration Paper	All IB standards
Content Specific Information		
Common Assessments / Major Projects	Internal Assessment	
Resources		My IB Resources (www.ib.org) InThinking IB Resource IB QuestionBank GaDOE Frameworks Teacher Resources