

# 11IB Mathematics: Analysis & Approaches SL 2021

WEEK	MONDAY	TOPIC	CONTENT	Textbook Reference
<b>Transition 2020</b>				
4.8	23-Nov	<b>Sequences and Series</b> (Core: Ch. 5)	Number sequences, Arithmetic and Geometric Sequences, Growth and Decay, Financial Mathematics and Series	5A-F
4.9	30-Nov			
4.10	7-Dec			
4.11	14-Dec			
<b>Term 1</b>				
1.1	25-Jan	<b>Sequences and Series</b> (Core: Ch. 5)	Sequences Review, Arithmetic Series, Finite Geometric Series	5G, 5H
1.2	1-Feb			
1.3	8-Feb			
<b>Sequences and Series Test (End of Week 1.3)</b>				
1.4	15-Feb	<b>Linear and Quadratic Functions</b> (Core: Ch. 1&4, AA: Ch. 2)	Perpendicular lines, Simultaneous equations, Quadratic equations, Surds	C.1C/D, C.4A, C.4D
1.5	22-Feb		Graphing Quadratics and Discriminant	2B, 2C
1.6	1-Mar		Rules from graphs, Intersections and Applications	2D/E, 2F/G
1.7	8-Mar		Quadratic inequalities and Revision	2H, Review
1.8	15-Mar		Test, Relations, Functions, Domain & range	3A/B, 3C
<b>Linear and Quadratics Test (Start of Week 1.8)</b>				
1.9	22-Mar	<b>Functions</b> (AA: Ch. 3&4)	Rational functions and Composite functions	3D, 3E
1.10	29-Mar		Inverse functions, Absolute value function and Translations	3F, 3G, 4A
<b>Term 2</b>				
2.1	19-Apr	<b>Functions</b> (AA: Ch. 3&4)	Stretches, reflections and combinations of transformations	4B-D
2.2	26-Apr		Revision, Test and Index laws revision	Review Sets, C.3D
<b>Functions Test (End of Week 2.2)</b>				
2.3	3-May	<b>Exponentials and Logarithms</b> (AA: Ch. 5&6)	Rational exponents, Exponential equations & functions	5A/B, 5C, 5D/F
2.4	10-May		Growth and decay, Logarithms and Laws of logarithms	5E, 6A/B, 6C/D
2.5	17-May		Log and exponential equations, Change of base and Logarithmic functions	6E/F, 6G, 6H
<b>Exponentials and Logarithms Test (Mid Week 2.6)</b>				
2.6	24-May	<b>Exam Revision</b>		
2.7	31-May	<b>Revision and Exams (Thurs 3/6 - Fri 11/6)</b>		
2.8	7-Jun	<b>Exams (Thurs 3/6 - Fri 11/6)</b>		
2.9	14-Jun	<b>TOK Camp</b>		
2.10	21-Jun	<b>Trigonometry</b> (Core: Ch. 7&8, AA: Ch. 7)	Radians and the Unit circle, Arc length and sector area, Right-angled triangle trigonometry	AA.7A/C.8A, AA.7B, C.7A-G
<b>Term 3</b>				
3.1	12-Jul	<b>Trigonometry</b> (Core: Ch. 7&8, AA: Ch. 7)	Area of a triangle and Cosine rule	C.8B-C
3.2	19-Jul		The Sine rule and ambiguous case, problem solving and revision	C.8D-F, Review Sets
<b>Trigonometry Test (Start of Week 3.3)</b>				
3.3	26-Jul	<b>Trigonometric Functions</b> (AA: Ch. 7, 8, 9)	The Unit Circle, Exact Values and the Pythagorean Identity	7C, 7D, 7E
3.4	2-Aug		Equation of a line, Sine and Cosine functions	7G, 8A/B, 8C
3.5	9-Aug		Modelling periodic behaviour and Tangent function	8D, 8E
3.6	16-Aug		Trigonometric equations, trigonometric models and identities	9A, 9B, 9C
3.7	23-Aug		Double angle identities and revision	9D, Review Set
<b>Trigonometric Functions Test (End of Week 3.7)</b>				
3.8	30-Aug	<b>Differential Calculus</b> (AA: Ch. 11 - 13)	Rates of change, limits, the derivative and first principles	11A/B, 11C, 11D-F
3.9	6-Sep		Rules for differentiation, Chain rule, Tangents & normals, Increasing & decreasing	12A, 12B, 13A-C
<b>Term 4</b>				
4.1	4-Oct	<b>Differential Calculus cont...</b>	Stationary points and revision	13D, Review Sets
<b>Differential Calculus Test (End of Week 4.1)</b>				
4.2	11-Oct	<b>Statistics</b> (Core: Ch. 11&12)	Sampling, Discrete and Continuous Data	11A/B, 11C-E, 11F
4.3	18-Oct		Centre of data, Grouped data, Box and whisker diagrams	12A-C, 12D/E, 12F-H
4.4	25-Oct		Cumulative Frequency, Variance and Standard deviation, Revision	12I/J, Review Sets
<b>Statistics Test (End of Week 4.4)</b>				
4.5	1-Nov	<b>Exam revision</b>		
4.6	8-Nov	<b>Exam revision</b>		
4.7	15-Nov	<b>Exams (Mon 15/11 - Fri 19/11)</b>		
4.8	22-Nov	<b>Transition Program</b>		
4.9	29-Nov	<b>Transition Program</b>		
4.10	6-Dec	<b>Transition Program</b>		

Assessment per topic: Mid-topic quiz  
 Assignment - extended response questions  
 End of topic test