

Teacher (5 lessons)

Teacher (4 lessons)

2 weeks commencing:	Chapter	Topic	LO	Homework	Chapter	Topic	LO	Homework
05 September 2021	C7	Trigonometry	1) Solving using the Addition Form	Ex 7B/ Solomon C3 wd	C2	Functions	1) Sketching and solving with $ f(x) $	Ex 2A
			2) Double Angle Formulae and pr	Ex 7C/ Solomon C3 wd			2) 1-1, Many-1, and non-Function	Ex 2B
			3) Solving with the Double Angle	Ex 7D/ Solomon C3 wd			3) Composite Functions	Ex 2C
			4) Deriving the Addition Formulae	Ex 7A			4) Inverse Functions	Ex 2D
			5) Proof with Addition and Double	Ex 7F				
19 September 2021	C7	Trigonometry	6) Alternative form	Ex 7E/ Solomon C3 wd	C2	Functions	5) Sketching and problem solving	Ex 2E
			7) Modelling (using alternative fo	Ex 7G			6) Combined transformations	Ex 2F
	C1	Algebraic methods	1) Decomposition of partial fracti	Ex 1C			7) Combined transformations wit	Ex 2G
03 October 2021			2) Partial fractions with repeated	Ex 1D	C6	Reciprocal Trigonometry	6) Inverse Trigonometric Functio	Ex 6E
			3) Improper fractions and the Fac	Ex 1E				
	C1	Algebraic methods	4) Improper fractions with partial	Ex 1F	A4	Moments	1) Introduction to Moments	Ex4B Q1,3,4
	A3	Normal distribution	1) Intro to Normal Distribution	Ex 3A			2) Moments on laminas	Ex4A, 4B Q2,5,6
			2) Using a calculator	Ex 3B			3) Equilibrium	Ex4C
3) Inverse normal			Ex 3C			4) Centre of Mass	Ex4D	
		4) The standard normal distributi	Ex 3D					
17 October 2021	A3	Normal distribution	5) Finding the mean and variance	Ex 3E	A4	Moments	5) Tilting	Ex4E
			6) Approximating binomial	Ex 3F			6) Practice & Problem Solving	Mixed Ex 4

Half Term

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2 weeks commencing:

Chapter	Topic	LO	Homework
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Chapter	Topic	LO	Homework
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31 October 2021	A3	Normal distribution	7) Normal and binomial distributions 8) Hypothesis tests	Worksheet made Ex 3G
	Year 13 PPE 1			
14 November 2021	A3	Normal distribution	9) Practice with LDS	Mixed Ex 3
	C4	Binomial Expansion	1) Using the formula	Ex 4A - Qn 1, 2, 3 & 6
			2) Using the formula to find a specific term	Ex 4A - Qn 4, 5, 7 & 8
			3) Taking out a factor before expansion	Ex 4B
		4) Binomial expansion with partial fractions	Ex 4C	
28 November 2021	C8	Parametric Equations	1) Changing to cartesian form	Ex 8A
			2) Using trigonometric identities	Ex 8B
			3) Sketching parametric equations	Ex 8C
			4) Finding points of intersection of two curves	Ex 8D
			5) Modelling with parametric equations	Ex 8E
12 December 2021	C9	Differentiation	1) Chain rule	Ex 9C
			2) Special case Chain rule $1/(dy/dx)$	Ex 9C - Qn 7-10

A5	Forces	1) Resolving Forces	Ex5A
		2) Inclined Planes	Ex5B
Year 13 PPE 1			
A5	Forces	3) Coefficient of friction	Ex5C (Q1-Q2) & Integ
		4) Coefficient of friction	Ex5C (Q3-7)
A7	Statics	1) Closed triangles for statics	Ex 7A
		2) Modelling with static particles	Ex 7B
Year 13 PPE 1			
A7	Statics	3) Friction and static particles	Ex 7C
		4) Statics and moments	Ex 7D
		5) Dynamics and inclined planes	Ex 7E
		6) Connected particles	Ex 7F
Year 13 PPE 1			
A7	Statics	7) Practice & Problem Solving	Mixed Ex 7
C3	Sequences & Series	1) Arithmetic Sequences	Ex 3A

End Of Autumn Term

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Teacher (4 lessons)

2 weeks commencing:

Chapter	Topic	LO	Homework
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Chapter	Topic	LO	Homework
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02 January 2022	C9	Differentiation	3) Differentiating sin x and cos x	Ex 9A
			4) Differentiating e & ln	Ex 9B
			5) Product rule	Ex 9D
			6) Quotient rule	Ex 9E
			7) Mixed practice and problem solving	Ex 9E
16 January 2022	C9	Differentiation	8) Differentiating trig functions	Ex 9F
			9) Parametric differentiation	Ex 9G
			10) Implicit differentiation	Ex 9H
			11) Concavity and Convexity	Ex 9I
30 January 2022	C11	Integration	1) Integrating standard functions	Ex 11A
			Year 13 PPE 2	
30 January 2022	C11	Integration	2) Integrating $f(ax + b)$	Ex 11B
			3) Integrating using the Trigonometric Identities	Ex 11C
			4) Reverse chain rule	Ex 11D

C3	Sequences & Series	2) Arithmetic Series	Ex 3B
		3) Geometric Sequences	Ex 3C
		4) Geometric Series	Ex 3D
		5) Sum to infinity	Ex 3E
C3	Sequences & Series	6) Sigma notation	Ex 3F
		7) Recurrence relations	Ex 3G & 3H
		8) Modelling with series	Ex 3K
A1	Correlation	1) Exponential Models	Ex 1A
Year 13 PPE 2			
A1	Correlation	2) Calculate the PMCC	Ex 1B
		3) Hypothesis testing for zero correlation	Ex 1C

Half Term

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Teacher (4 lessons)

2 weeks commencing:	Chapter	Topic	LO	Homework	Chapter	Topic	LO	Homework
20 February 2022	C11	Integration	5) Integration by substitution	Ex 11E	A1	Correlation	4) Practice with LDS	Mixed Ex 1
			6) Integration by parts	Ex 11F	A8	Variable Acceleration	1) Vectors in Kinematics	1) Exercise 8A & 8B
			7) Integrating partial fractions	Ex 11G			2) Variable acceleration in one di	2) Exercise 8C
			8) Finding areas	EX 11H			3) Differentiating vectors	3) Exercise 8D
9) Parametric integration	Re-released textbook							
06 March 2022	C11	Integration	10) Trapezium rule	Ex 11I	A8	Variable Acceleration	4) Integrating vectors	4) Exercise 8E
			11) Mixed question practice	Integral/ Solomon/ C4	A6	Projectiles	1) Horizontal projection	Ex 6A
	A2	Probability	1) Probability with Venn Diagrams	Ex 2A			2) Horizontal and vertical compo	Ex 6B
			2) Conditional Probability	Ex 2B			3) Projection at any angle	Ex 6C
3) Probability Formula	Ex 2C							
20 March 2022	A2	Probability	4) Tree Diagrams	Ex 2D	A6	Projectiles	4) Projection motion formula	Ex 6D
	C9 & C11	Differential Equations	1) Rates of change	Ex 9J			5) Practice & Problem Solving	Mixed Ex 6
			2) Solving differential equations	Ex 11J	C1	Proof by Contradiction	1) Proof by contradiction	Ex 1A
			3) Modelling with differential equ	Ex 11K			2) Practice & Problem Solving	Integral Worksheet
			4) Mixed question practice	Integral/ Solomon/ C4				

End of Spring Term

Teacher (5 lessons)

Teacher (4 lessons)

2 weeks commencing:	Chapter	Topic	LO	Homework	Chapter	Topic	LO	Homework
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17 April 2022	Year 13 PPE 3				Year 13 PPE 3			
	C10	Numerical Methods	1) Showing roots and bounds	Ex 10A	C12	Vectors	1) 3D Coordinates	Ex 12A
			2) Iterative formulae	Ex 10B			2) Vectors in 3D	Ex 12B
3) Newton-Raphson			Ex 10C					
01 May 2022	C10	Numerical Methods	4) Modelling	Ex 10D	C12	Vectors	3) Solving geometric problems	Ex 12C
			Revision & Re-teaching	Targeted Practice			4) Vectors in mechanics	Ex 12D
			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice
			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice
			Revision & Re-teaching	Targeted Practice			Revision & Re-teaching	Targeted Practice
15 May 2022	Year 13 Public Exams				Year 13 Public Exams			

Half Term

05 June 2022	Year 13 Public Exams				Year 13 Public Exams			
19 June 2022	Year 13 Public Exams				Year 13 Public Exams			

End of Summer Term