

Further Mathematics Timetable Year 13 2023-34

Included in Jan Y13 mock

Wk	Date	A	B
A	1		
B	2	<ol style="list-style-type: none"> 1. Polar coordinates and equations 5A 2. Polar coordinates and equations 5A 	<ol style="list-style-type: none"> 1. Introducing hyperbolics 6A 2. Inverse hyperbolic functions 6B 3. Identities and equations 6C
A	3		
B	4	<ol style="list-style-type: none"> 1. Sketching curves 5B 2. Sketching curves 5B 3. Area enclosed by a polar curve 5C 	<ol style="list-style-type: none"> 1. Differentiating hyperbolic functions 6D 2. Integrating hyperbolic functions 6E 3. Mixed Exercise 6 4. Mixed Exercise 6
A	5		
B	6	<ol style="list-style-type: none"> 1. Area enclosed by a polar curve 5C 2. Tangents to polar curves 5D 3. Tangents to polar curves 5D 	<ol style="list-style-type: none"> 1. Ellipses 3A and Hyperbolas 3B 2. Eccentricity of hyperbolas 3C 3. Tangents and normal to an ellipse 3D 4. Tangents and normal to a hyperbola 3E
A	7	<ol style="list-style-type: none"> 1. Mixed Exercise 5 	<ol style="list-style-type: none"> 1. Loci 3F 2. Mixed Exercise 3
Half Term			
B	1		
A	2	<ol style="list-style-type: none"> 1. Higher derivatives 2B 2. Maclaurin series 2C 3. Maclaurin series 2C 	<ol style="list-style-type: none"> 1. Mixed Exercise 3 2. Improper integrals 3A 3. Mean value of a function 3B 4. Differentiating inverse trig functions 3C
B	3	<ol style="list-style-type: none"> 1. Series expansion of compound functions 2D 2. Mixed Exercise 2 3. Taylor series 6A 	<ol style="list-style-type: none"> 1. Integrating inverse trig functions 3D 2. Integrating using partial fractions 3E 3. Mixed Exercise 3 4. Mixed Exercise 3
A	4		
B	5	<ol style="list-style-type: none"> 1. Taylor series 6A 2. Finding limits 6B 3. Finding limits 6B 	<ol style="list-style-type: none"> 1. Leibnitz's theorem and nth derivatives 7A 2. L'Hospital's rule 7B 3. The Weierstrass substitution 7C 4. Mixed Exercise 7
A	6		
B	7	<ol style="list-style-type: none"> 1. Series solutions of DE's 6C 2. Series solutions of DE's 6C 	<ol style="list-style-type: none"> 1. Solving first-order differential equations 8A 2. The midpoint method 8B
Christmas			
A	1	<ol style="list-style-type: none"> 1. Mixed Exercise 6 	<ol style="list-style-type: none"> 1. Solving second-order differential equations 8C

B	2	2. Revision 3. Exam Week	2. Simpson's rule 8D 3. Revision 4. Revision
A	3	1. Exam Week 2. Feedback 3. First-order differential equations 7A	1. Revision 2. Exam Week 3. Exam Week 4. Feedback
B	4		
A	5	1. First-order differential equations 7A 2. Second-order homogeneous equations 7B 3. Second-order homogeneous equations 7B	4. Mixed Exercise 8 5. Volumes of revolution around the x-axis 4A 6. Volumes of revolution around the y-axis 4B 7. Parametric volumes of revolution 4C
B	6		
A	7	1. Second-order non-homogeneous equations 7C	1. Modelling with volumes of revolution 4D 2. Mixed Exercise 4
Half Term			
B	1	1. Using boundary conditions 7D 2. Mixed Exercise 7 3. The t-formula 5A	1. First order reducible DE's 9A 2. Second order differential equations 9B
A	2		
B	3	1. Applying t-formula to trig identities 5B 2. Solving trig equations 5C	1. Modelling with differential equations 9C 2. Mixed Exercise 9 3. Modelling with first-order differential equations 8A 4. Simple harmonic motion 8B
A	4		
B	5	1. Modelling with trigonometry 5D 2. Mixed Exercise 5	1. Simple harmonic motion 8B 2. Damped and forced harmonic motion 8C 3. Coupled first-order simultaneous DE's 8D 4. Mixed Exercise 8
A	6		
Easter			
A	1	Revision	Revision
B	2		
A	3		
B	4		
A	5		
Study Leave			