



Oxford Cambridge and RSA

Wednesday 19 June 2024 – Afternoon

A Level Further Mathematics B (MEI)

Y434/01 Numerical Methods

Printed Answer Booklet

Time allowed: 1 hour 15 minutes



You must have:

- Question Paper Y434/01 (inside this document)
- the Formulae Booklet for Further Mathematics B (MEI)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

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Last name

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INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided in the **Printed Answer Booklet**. If you need extra space use the lined page at the end of the Printed Answer Booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Where appropriate, your answer should be supported with working. Marks might be given for using a correct method, even if your answer is wrong.
- Give your final answers to a degree of accuracy that is appropriate to the context.

INFORMATION

- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

1(a)	
1(b)	
2(a)	
	Relative error R_A :
Relative error R_B :	

2(b)	
2(c)	
3(a)	

3(b)	
3(c)	
	3(d)

4(a)

t	T	ΔT	ΔT^2
0	8.8		
1	13.2		
2	15.4		
3	15.4		
4	13.3		

4(b)

4(c)

4(d)	
4(e)	
5(a)	
5(b)	
5(c)	

5(d)

	A	B	C	D	E	F	
1	a	$f(a)$	b	$f(b)$	c	$f(c)$	
2	2	-0.6109	3	6.08554	2.5	1.43249	
3	2	-0.6109	2.5	1.43249	2.25	0.17524	
4	2	-0.6109	2.25	0.17524	2.125	-0.2677	
5	2.125	-0.2677	2.25	0.17524	2.1875	-0.0598	
6							

5(e)

5(f)

6(a)	
6(b)	
6(c)(i)	
6(c)(ii)	
6(d)	
(answer space continued on next page)	

6(d) (continued)

7(a)

n	M_n	T_n	S_{2n}
1	0.612547	1	
2	0.639735		

7(b)

7(c)	
7(d)(i)	
7(d)(ii)	
7(d)(iii)	

[illegible]

[illegible]

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