



Oxford Cambridge and RSA

Thursday 20 June 2019 – Morning

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 (inserted)
- Formulae Further Mathematics B (MEI)

You may use:

- 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)

Last name

INSTRUCTIONS

- The Question Paper will be found inside the Printed Answer Booklet.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- **Write your answer to each question in the space provided in the Printed Answer Booklet.** If additional space is required, use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- You are permitted to use a scientific or graphical calculator in this paper.
- Final answers should be given to a degree of accuracy appropriate to the context.

INFORMATION

- You are advised that an answer may receive **no marks** unless you show sufficient detail of the working to indicate that a correct method is used. You should communicate your method with correct reasoning.
- The Printed Answer Booklet consists of **12** pages. The Question Paper consists of **8** pages.

1(a)	
1(b)	
1(c)	
1(d)	

2(a)	
2(b)	
2(c)	
2(d)	
2(e)	
2(f)	

3(a)

n	y	Δ	Δ^2	Δ^3
1	9			
2	32			
3	63			
4	96			
5	125			

3(b)

3(c)	
	3(d)
3(e)	

4(a)	
4(b)	
4(c)	
4(d)	

4(e)	
4(f)	
4(g)	

5(a)	
5(b)	
5(c)	
5(d)	
5(e)	
5(f)	
5(g)	

6(a)						

6(b)		A	B	C	Simpsons	Difference	Ratio	
	1	n	M_n	T_n				
	2	1	1.632527	1				
	3	2	1.641461	1.316263				
	4	4	1.623053	1.478862				
	5	8	1.610295	1.550957				
	6	16	1.604132	1.580626				
	7	32	1.601505	1.592379				

