

Wednesday 25 May 2022 – Afternoon

A Level Further Mathematics B (MEI)

Y420/01 Core Pure

Printed Answer Booklet

Time allowed: 2 hours 40 minutes

You must have:

- Question Paper Y420/01 (inside this document)
- the Formulae Booklet for Further Mathematics B (MEI)
- · a scientific or graphical calculator



Please write cle	arly in b	olack	ink. I	Do no	ot writ	e in the barcodes.			
Centre number						Candidate number			
First name(s)									
Last name									,

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 pages 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 24 pages.

ADVICE

· Read each question carefully before you start your answer.



Section A (37 marks)

1(a)	
1(b)	
1(b)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	
1(0)	

2	

3	

4(a)	
4(b)	

5(a)	
5(b)	

6	

Section B (107 marks)

7	
	(answer space continued on next page)

7	(continued)

8(a)	
8(b)	

9(a)	
9(b)(i)	
9(b)(ii)	

9(c)	
9(d)	
)(u)	

10(a)	
10(b)	a = b =

11(a)(i)					
		Im			
		Im ↑			
			z_1		
			$\overset{z_1}{A}$		
				→ Re	
		0		→ KC	
11(a)(ii)					
11(b)					

12	

13(a)	
13(b)	
	Coordinates =

13(c)(i)	
13(c)(ii)	
13(c)(iii)	

14(a)	
14(b)	
	(answer space continued on next page)

14(b)	(continued)

15(a)(i)	
15(a)(ii)	
15(a)(iii)	
15()())	
15(a)(iv)	

15(a)(v)	
15(b)(i)	
15(b)(ii)	
15(b)(iii)	

15(c)(i)	
	(answer space continued on next page)

15(c)(i)	(continued)
15(c)(ii)	

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).



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