



Oxford Cambridge and RSA

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 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

- 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)	

4(a)

4(b)

5(a)

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5(b)

8(a)

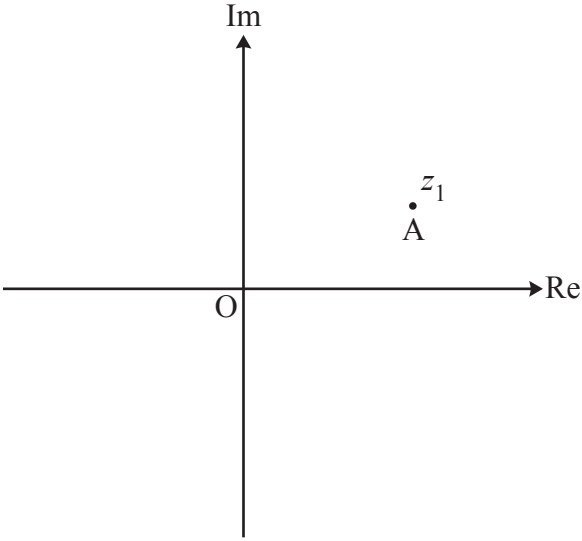
8(b)

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

9(c)	

9(d)	

10(a)**10(b)** $a =$ $b =$

11(a)(i)	 <p>A complex plane diagram showing the real axis (Re) and the imaginary axis (Im). The origin is labeled O. A point A is marked in the first quadrant, with a label z_1 above it.</p>
11(a)(ii)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
11(b)	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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)

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

