



Oxford Cambridge and RSA

Wednesday 14 June 2023 – Afternoon

A Level Further Mathematics B (MEI)

Y431/01 Mechanics Minor

Printed Answer Booklet

Time allowed: 1 hour 15 minutes



You must have:

- Question Paper Y431/01 (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.
- The acceleration due to gravity is denoted by $g \text{ m s}^{-2}$. When a numerical value is needed use $g = 9.8$ unless a different value is specified in the question.

INFORMATION

- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

1(a)	
	[Force] =
	[Velocity] =
	[Density] =
1(b)	
1(c)	
1(d)	
	$\alpha =$
	$\beta =$
$\gamma =$	

2(a)

2(b)

3(b)	

3(c)	

4(a)

4(b)

4(c)**5(a)** $H =$ $\theta =$

5(b)	

5(c)	

6(b)	(continued)
6(c)	

