

Wednesday 14 June 2023 – Afternoon

AS Level Further Mathematics A

Y533/01 Mechanics

Printed Answer Booklet

Time allowed: 1 hour 15 minutes



You must have:

- Question Paper Y533/01 (inside this document)
- the Formulae Booklet for AS Level Further Mathematics A
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write 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 non-exact numerical answers correct to **3** significant figures unless a different degree of accuracy is specified in the question.
- 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

- The total mark for this paper is **60**.
- The marks for each question are shown in brackets [].
- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

1(a)

1(b)

2(a)**2(b)**

3(a)	
3(b)(i)	
3(b)(ii)	
3(c)	
3(d)	

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

5(a)(i)	
5(a)(ii)	
5(a)(iii)	

6(a)	
6(b)	
6(c)	

6(d)(i)	
6(d)(ii)	
6(d)(iii)	

7(a)	
7(b)	

(answer space continued on next page)

