

Thursday 16 May 2024 – Afternoon

AS Level Mathematics B (MEI)

H630/01 Pure Mathematics and Mechanics

Printed Answer Booklet

Time allowed: 1 hour 30 minutes

You must have:

- Question Paper H630/01 (inside this document)
- 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						

84 33₁₂₈₄

34 331284

84 331284

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 guestion 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 $gm s^{-2}$. When a numerical value is needed use g = 9.8 unless a different value is specified in the question.

INFORMATION

This document has 16 pages.

ADVICE

Read each question carefully before you start your answer.



1	
_	
2	

3	
4	

5(a)	

5(b)	
6(a)	

6(b)	
	b =
	c =
6(c)	

7(a)	
7(b)	
7(c)	
7(0)	

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

8(b)	(continued)
9(a)	
9(b)	

9(c)	$v (\mathrm{m} \mathrm{s}^{-1})$
	25
	20 -
	15-
	10-
	5 -
	$0 \xrightarrow{0} 5 10 15 20 25 30 t (s)$
0(1)	0 5 10 15 20 25 30 $t(s)$
9(d)	
9(e)	
` '	
10(a)	

10(b)(i)	
10(b)(ii)	
10(c)	
10(0)	
10(d)	

11(a)	
	k =
	n =
11(b)	

12(a)	
12(b)	

12(c)	

15

EXTRA ANSWER SPACE

If you need extra space use these lined pages. You must write the question numbers clearly in the margin.



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