

Tuesday 4 June 2024 - Afternoon

A Level Mathematics A

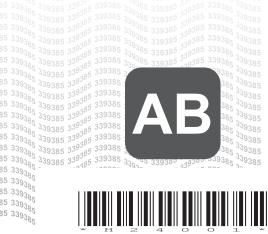
H240/01 Pure Mathematics

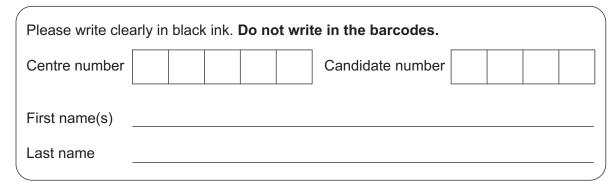
Printed Answer Booklet

Time allowed: 2 hours

You must have:

- Question Paper H240/01 (inside this document)
- a scientific or graphical calculator





85 339₃₈₅

85 3393₈₅ 85 339₃₈₅

35 339₃₈₅

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 page 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 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 $gm s^{-2}$. 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 100.
- The marks for each question are shown in brackets [].
- This document has 16 pages.

ADVICE

Read each question carefully before you start your answer.



1(a)	
1.5	
1(b)	
1(c)	

2(a)(i)	
2(a)(ii)	
2(b)	

3(a)	
3(b)(i)	$x^2 = 3x \qquad x = 3$
3(b)(ii)	$x > 4 \qquad \qquad x^3 > 64$
3(b)(iii)	$x^{\circ} = 45^{\circ}$ $\tan x^{\circ} = 1$
3(c)	

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

5	

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

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

8(b)(i)	
8(b)(i)	
8(b)(i)	
8(b)(i)	
8(b)(ii)	
8(c)(i)	
8(c)(ii)	

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

10	

11(a)	
11(b)	
11(0)	

11(c)(i)	
11(c)(ii)	

12(a)	

12(b)	

16

EXTRA ANSWER SPACE

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



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