



Oxford Cambridge and RSA

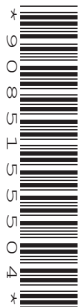
**Wednesday 8 June 2022 – Afternoon**

**AS Level Mathematics A**

**H230/02 Pure Mathematics and Mechanics**

**Printed Answer Booklet**

**Time allowed: 1 hour 30 minutes**



**You must have:**

- Question Paper H230/02 (inside this document)
- 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)

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Last name

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**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 **75**.
- The marks for each question are shown in brackets [ ].
- This document has **16** pages.

**ADVICE**

- Read each question carefully before you start your answer.

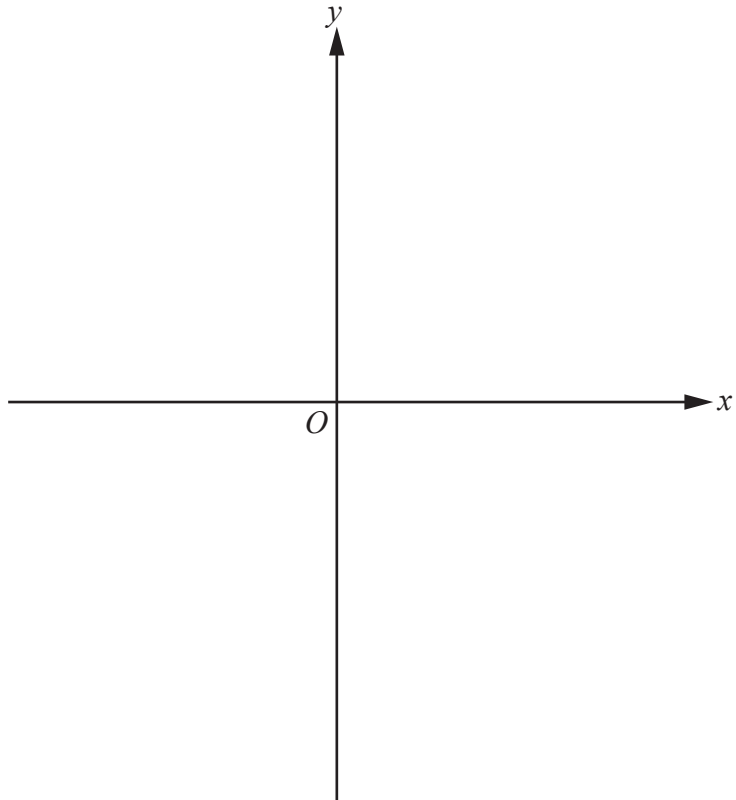
**Section A: Pure Mathematics**

<b>1</b>	
<b>2</b>	



<b>5(a)(i)</b>	

5(a)(ii)



5(b)


5(c)


<b>6(a)</b>	
<b>6(b)</b>	
<b>6(c)</b>	
<b>(answer space continued on next page)</b>	

<b>6(c)</b>	<b>(continued)</b>

<b>6(d)</b>	







<b>8(a)</b>	
<b>8(b)</b>	
<b>(answer space continued on next page)</b>	



**12**  
**Section B: Mechanics**

<b>9</b>	
<b>10</b>	
<b>11(a)</b>	



<b>12(a)</b>	
<b>12(b)</b>	

<b>12(c)</b>	
<b>12(d)</b>	

**ADDITIONAL ANSWER SPACE**

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).




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