



Oxford Cambridge and RSA

**Thursday 19 May 2022 – Afternoon**

**AS Level Mathematics A**

**H230/01 Pure Mathematics and Statistics**

**Printed Answer Booklet**

**Time allowed: 1 hour 30 minutes**



**You must have:**

- Question Paper H230/01 (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  $g \text{ ms}^{-2}$ . 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.

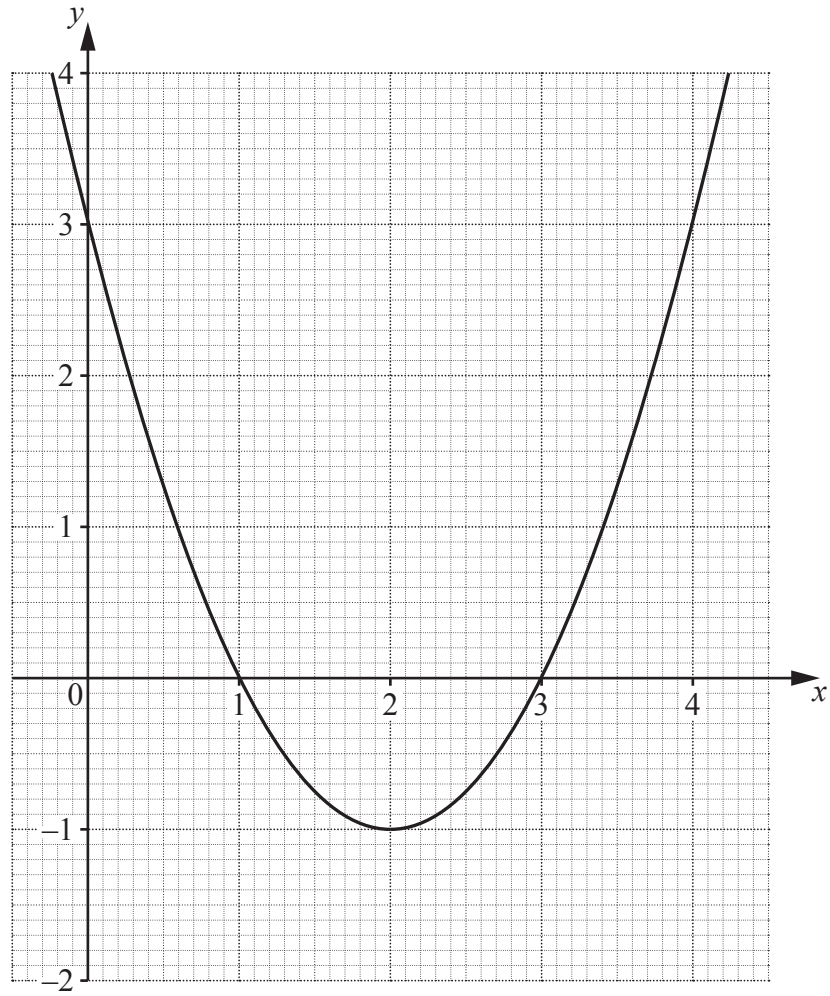
**ADVICE**

- Read each question carefully before you start your answer.

Section A: Pure Mathematics

<b>1</b>	
<b>2(a)</b>	
<b>2(b)</b>	

3(a)  
3(b)  
3(c)



3(a)


3(b)

Value(s) of  $x =$  .....

3(c)

Please answer this question on the graph above.

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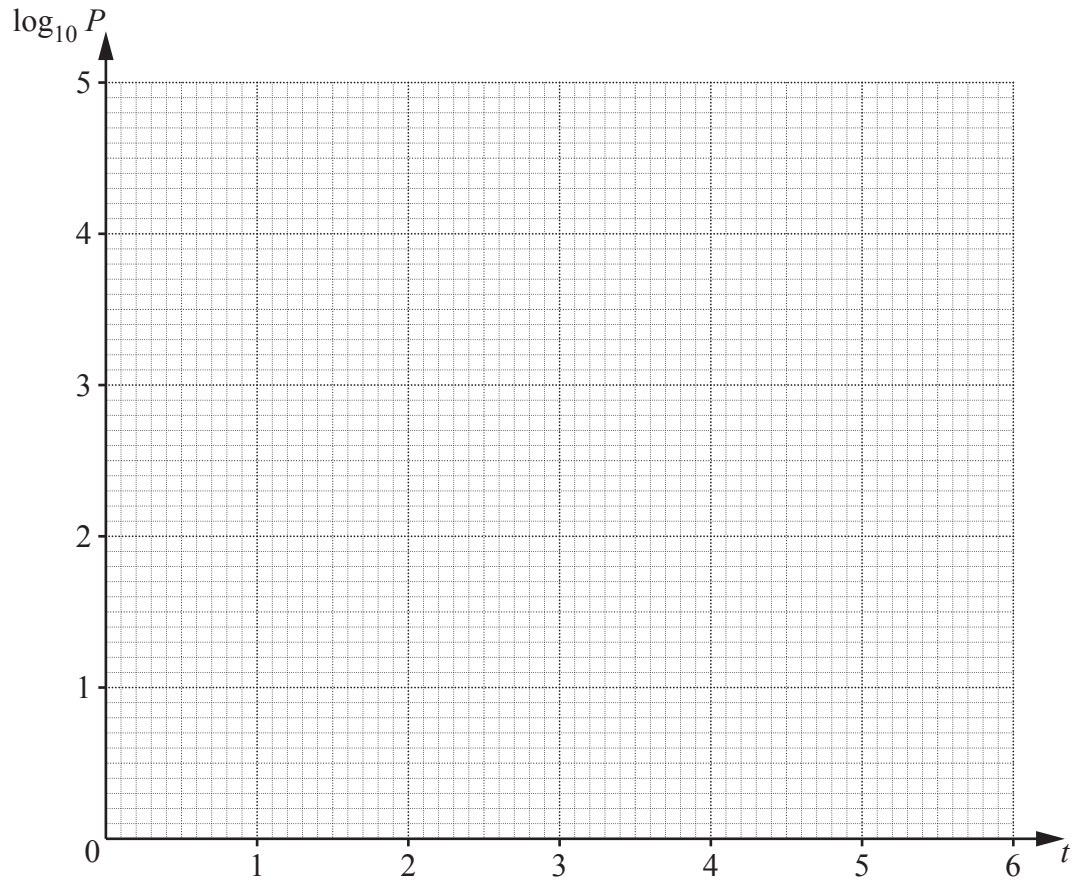
<b>4(a)</b>	
<b>4(b)</b>	

**5(a)**


**5(b)**


<b>6(a)(i)</b>	
<b>6(a)(ii)</b>	
<b>6(b)(i)</b>	

<b>6(b)(ii)</b>	$t$	1	2	3	4	5	
	$P$	100	500	1800	7000	19000	
	$\log_{10} P$	2.00	2.70	3.26	3.85	4.28	



**6(b)(iii)**






<b>7(b)</b>	

**Section B: Statistics**

<b>8(a)</b>	

<b>8(b)</b>	

<b>9(a)(i)</b>	

<b>9(a)(ii)</b>	

<b>9(b)</b>	
<b>9(c)</b>	

<b>10(a)</b>	
<b>10(b)</b>	
<b>10(c)</b>	
<b>10(d)</b>	

<b>11(a)(i)</b>	
<b>11(a)(ii)</b>	

<b>11(b)</b>	

**PLEASE DO NOT WRITE IN THIS SPACE**





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