



Oxford Cambridge and RSA

# Wednesday 07 October 2020 – 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

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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 your final answers to a degree of accuracy that is appropriate to the context.
- 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

- This document has **16** pages.

### ADVICE

- Read each question carefully before you start your answer.

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

<b>3(a)</b>	

<b>3(b)</b>	

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

5(a)	$x$ for P	$y$ for P	$h$	$x$ for Q	$y$ for Q	change in $y$	gradient PQ
	1	1	1				
	1	1	0.1	1.1	1.048 809	0.048 809	0.488 088
	1	1	0.01	1.01	1.004 988	0.004 988	0.498 756
	1	1	0.001	1.001	1.000 500	0.000 500	0.499 875
5(b)							
5(c)							

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

<b>7(a)</b>	
<b>7(b)</b>	

8	



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

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

<b>11(a)</b>	
<b>11(b)</b>	
<b>11(c)</b>	
<b>(answer space continued on next page)</b>	



<b>12(a)</b>	

12(b)	



