

# AS Level Mathematics B (MEI)

**H630/01** Pure Mathematics and Mechanics Printed Answer Booklet

# Wednesday 16 May 2018 - Morning

Time allowed: 1 hour 30 minutes

#### You must have:

· Question Paper H630/01 (inserted)

#### You may use:

· a scientific or graphical calculator



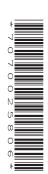
First name					
Last name					
Centre number			Candidate number		

#### **INSTRUCTIONS**

- The Question Paper will be found inside the Printed Answer Booklet.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Complete the boxes provided on the Printed Answer Booklet with your name, centre number and candidate number.
- Answer all the questions.
- Write your answer to each question in the space provided in the Printed Answer Booklet. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the barcodes.
- You are permitted to use a scientific or graphical calculator in this paper.
- Final answers should be given to a degree of accuracy appropriate to the context.
- The acceleration due to gravity is denoted by  $g \, \mathrm{m} \, \mathrm{s}^{-2}$ . Unless otherwise instructed, when a numerical value is needed, use g = 9.8.

#### **INFORMATION**

- You are advised that an answer may receive no marks unless you show sufficient detail
  of the working to indicate that a correct method is used. You should communicate your
  method with correct reasoning.
- The Printed Answer Booklet consists of 16 pages. The Question Paper consists of 8 pages.



1	
2	
3	

4	4m kg
	$lack m  \mathrm{kg}$
	Fig. 4

5(i)	
5(ii)	
5(iii)	

6 (i)	
0 (1)	
6 (ii)	

7	

8	
	(answer space continued on next page)

8	(continued)
9 (i)	

9 (ii)	

10 (i)	
10 (ii)	
10(11)	
10 (iii)	

10 (iv)	
10 (v)	
10 (vi)	
10(11)	

11 (ii)	
11 (iii)	
11 (iii)	
11 (iii)	
$\frac{\ln x}{\ln y}$	
Jupiter	
11 (iv)	

11 (v)	
11 (vi)	
11(vii)	

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## 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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