



Oxford Cambridge and RSA

# A Level Mathematics A

H240/03 Pure Mathematics and Mechanics  
Printed Answer Booklet

**Friday 15 June 2018 – Afternoon**

**Time allowed: 2 hours**



**You must have:**

- Question Paper H240/03 (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  $g\text{ m s}^{-2}$ . Unless otherwise instructed, when a numerical value is needed, use  $g = 9.8$ .

### INFORMATION

- **You are reminded of the need for clear presentation in your answers.**
- The Printed Answer Booklet consists of **16** pages. The Question Paper consists of **8** pages.

Section A: Pure Mathematics

<b>1(i)</b>	
<b>1(ii)</b>	
<b>2</b>	

3

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

<b>5(i)</b>	

<b>5(ii)</b>	

**(answer space continued on next page)**

<b>5(ii)</b>	<b>(continued)</b>
<b>5(ii)</b>	

**6(i)**


**6(ii)**








Section B: Mechanics

<b>8(i)</b>	
<b>8(ii)</b>	
<b>9(i)</b>	

<b>9(ii)</b>	
<b>9(iii)</b>	
<b>9(iv)(a)</b>	
<b>9(iv)(b)</b>	
<b>10(i)</b>	

<b>10(ii)</b>	
<b>10(iii)(a)</b>	
	<b>10(iii)(b)</b>

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

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

<b>12(ii)</b>	

