



Oxford Cambridge and RSA

# AS Level Mathematics A

## H230/02 Pure Mathematics and Mechanics

### Printed Answer Booklet

# Wednesday 23 May 2018 – Morning

## Time allowed: 1 hour 30 minutes



**You must have:**

- Question Paper H230/02 (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.** Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- 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 **12** pages. The Question Paper consists of **8** pages.

Section A: Pure Maths

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

<b>2 (i)</b>	
<b>2 (ii)</b>	
<b>3 (i)</b>	
<b>3 (ii)</b>	
<b>3 (iii)</b>	
<b>4 (i)</b>	

<b>4 (ii)</b>	
<b>4 (iii)</b>	



<b>6 (i)</b>	
<b>6 (ii)</b>	
<b>6 (iii)</b>	
<b>6 (iv)</b>	
<b>6 (v)</b>	

**7(i)**


**7(ii)**






<b>8</b>	<b>(continued)</b>

**Section B: Mechanics**

<b>9</b>	

<b>10 (i)</b>	

<b>10 (ii)</b>	

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

<b>11 (iii)</b>	