

# Wednesday 15 May 2019 – Morning

## 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	(inserted)

You may use:

• a scientific or graphical calculator



Please write clearly in black ink. Do not write in the barcodes.										
Centre number						Candidate number				
First name(s)										
_ast name										

#### 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.
- 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.
- You are permitted to use a scientific or graphical calculator in this paper.
- 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  $gm s^{-2}$ . 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.

2

### **Section A: Pure Mathematics**

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1(a)	
1(b)	
1(0)	
1(c)	
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2	

3

3(a)(i)	
3(a)(ii)	

<b>3(b)</b>	

4(a)	
4(b)	

5(a)	
5(b)	

6(a)	
$\mathbf{U}(\mathbf{a})$	
6(b)	

7(a)	
7(b)	

9

7(c)	

## 11 Section B: Statistics

<b>8(a)</b>	
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8(b)	
9(a)	
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9(b)	
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9(c)	
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10(a)	
10(1)	
10(b)	
10(c)	

11(a)	
11(b)	

12	
	(answer space continued on next page)
	(answer space continued on next page)

12	(continued)

#### 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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