

# Thursday 25 May 2023 – Afternoon

## A Level Further Mathematics A

### **Y540/01** Pure Core 1

### Printed Answer Booklet

### Time allowed: 1 hour 30 minutes



# You must have: Question Paper Y540/01 (inside this document) the Formulae Booklet for A Level Further Mathematics A

a scientific or graphical calculator



Please write clear	ly in black	ink. <b>Do n</b>	ot writ	e in the barcodes.		
Centre number				Candidate number		
First name(s) _						
Last name					 	 

#### 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 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  $gm s^{-2}$ . When a numerical value is needed use g = 9.8 unless a different value is specified in the question.

### INFORMATION

- The total mark for this paper is 75.
- The marks for each question are shown in brackets [].
- This document has 16 pages.

### ADVICE

• Read each question carefully before you start your answer.

1	
<b>2(a)</b>	

3

<b>2(b)</b>	

4	
-	

<b>3(a)</b>	
<b>3(b)</b>	

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

4(c)(i)	
4(c)(ii)	
4(C)(II)	

<b>5(a)</b>	
5(b)	

8

6	

7(a)(i)	
7(a)(ii)	
7(b)(i)	
7(b)(ii)	
7(0)(11)	
7(b)(iii)	

7(c)(i)	
7(c)(ii)	
<b>8</b> (a)	

<b>8(b)</b>	
<b>8</b> (c)	

<b>8(d)</b>	

<b>9(a)</b>	

<b>9(b)</b>	

<b>9(c)</b>	

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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