OCR
Oxford Cambridge and RSA

Friday 13 June 2025 – Afternoon

A Level Further Mathematics A

Y543/01 Mechanics

Printed Answer Booklet

Time allowed: 1 hour 30 minutes

AB

You must have:
- Question Paper Y543/01 (inside this document)
- the Formulae Booklet for A Level Further Mathematics A
- a scientific or graphical calculator

Please write clearly in black ink. **Do not write 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 $g\,\mathrm{m\,s^{-2}}$. 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.

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1(a)	
1(b)	
1(c)	
1(d)	
2(a)	

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2(b)	
3(a)	
3(b)	
3(c)	

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4(a)	
4(b)	

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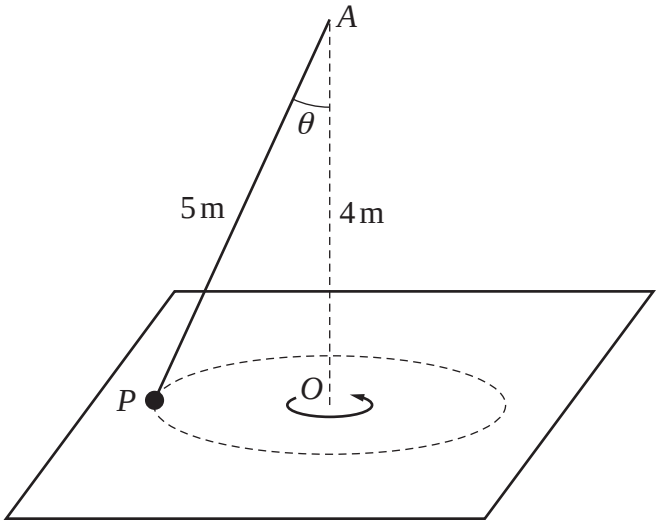
5(a)



5(b)

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6(a)

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6(b)	

DO NOT WRITE IN THIS SPACE

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7(a)

7(b)

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7(c)

8(a)(i)	
8(a)(ii)	

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8(b)	
	$\overline{X} =$ $\overline{Y} =$
8(c)(i)	
8(c)(ii)	

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9

(answer space continued on next page)

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9 **(continued)**

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EXTRA ANSWER SPACE

If you need extra space use these lined pages. You must write the question numbers clearly in the margin.

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