

Friday 16 May 2025 – Afternoon

AS Level Further Mathematics B (MEI)

Y411/01 Mechanics a

Printed Answer Booklet

Time allowed: 1 hour 15 minutes



You must have:

- Question Paper Y411/01 (inside this document)
- the Formulae Booklet for Further Mathematics B (MEI)
- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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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 page 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 your final answers to a degree of accuracy that is appropriate to the context.
- The acceleration due to gravity is denoted by $g \text{ m s}^{-2}$. When a numerical value is needed use $g = 9.8$ unless a different value is specified in the question.

INFORMATION

- This document has **12** pages.

ADVICE

- Read each question carefully before you start your answer.

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| 1(a) | |
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| 1(b) | |
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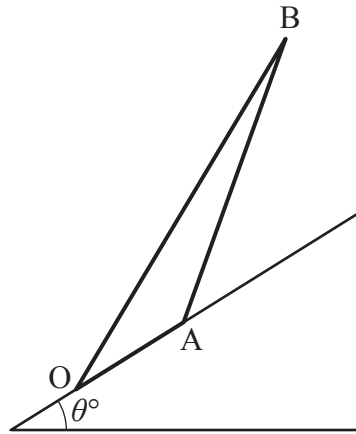
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| 2(a) | |
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| 2(b) | |
| 2(c) | |
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| 2(d) | |
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| 3(a) | |
| 3(b) | |
| 3(c) | |
| 3(d) | |

5(a)

5(b)

5(c)

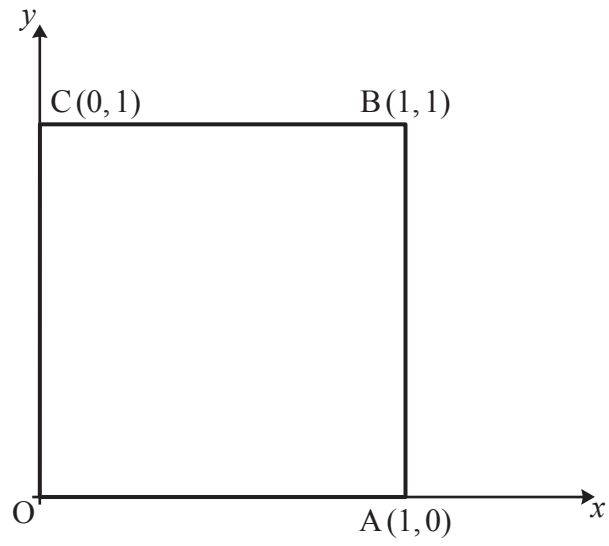


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| 6(a) | |
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| 6(b) | |
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| 6(c) | |
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| 6(d) | |
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| 6(e) | |
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DO NOT WRITE IN THIS SPACE

7(a)

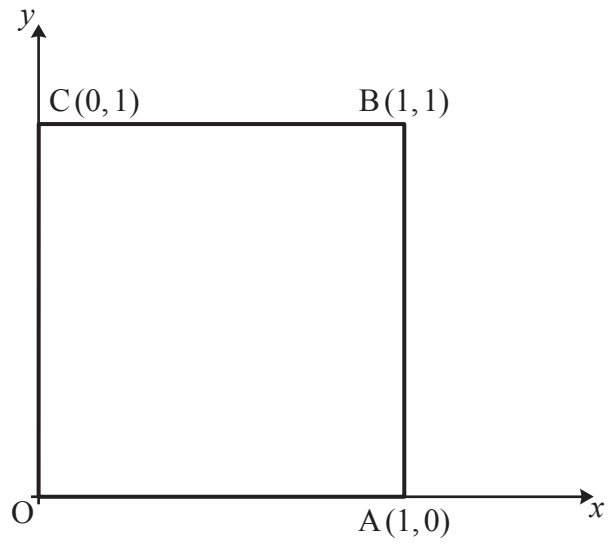


$$p =$$

$$q =$$

$$r =$$

7(b)



7(c)

