

A Level Further Mathematics B (MEI)

Y421 Mechanics Major

Printed Answer Booklet

Version 2

Date – Morning/Afternoon

Time allowed: 2 hours 15 minutes

You must have:

- Question Paper Y421 (inserted)
- Formulae Further Mathematics B (MEI)

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 bar codes.
- 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 advised that an answer may receive **no marks** unless you show sufficient detail of the working to indicate that a correct method is used. You should communicate your method with correct reasoning.
- The Printed Answer Booklet consists of **20** pages. The Question Paper consists of **12** pages.

Section A (26 marks)

1	
2	

4 (i)	
4 (ii)	
4 (iii)	

Section B (94 marks)

6 (i)	
6 (ii)	

6 (iii)	
7 (i)	

7 (ii) <i>(A)</i>	
7 (ii) <i>(B)</i>	

PLEASE DO NOT WRITE IN THIS SPACE

8 (iii)	

10 (i)	
10 (ii)	

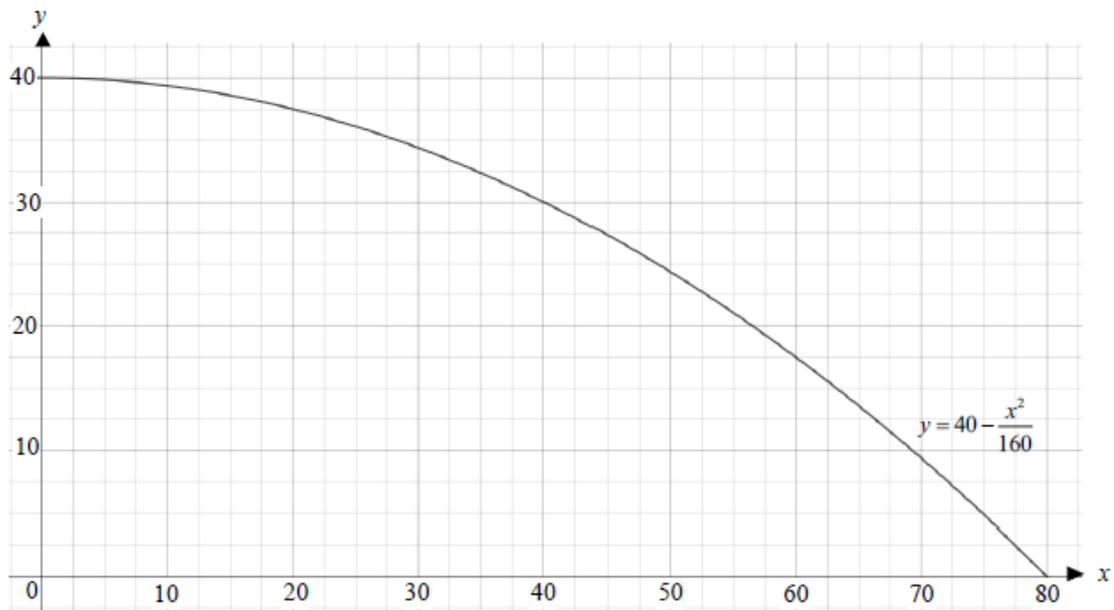
10 (iii) <i>(A)</i>	
10 (iii) <i>(B)</i>	
10 (iv)	
10 (v)	

11 (ii)	

11 (iii)	

12 (v)

Spare copy of graph for question 12 (ii) and 12 (iii)

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