

Wednesday 25 January 2012 – Afternoon

A2 GCE MATHEMATICS (MEI)

4758/01 Differential Equations

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

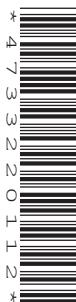
OCR supplied materials:

- Question Paper 4758/01 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other materials required:

- Scientific or graphical calculator

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
Centre number		Candidate number	

INSTRUCTIONS TO CANDIDATES

These instructions are the same on the Printed Answer Book and the Question Paper.

- The Question Paper will be found in the centre of the Printed Answer Book.
- Write your name, centre number and candidate number in the spaces provided on the Printed Answer Book. Please write clearly and in capital letters.
- **Write your answer to each question in the space provided in the Printed Answer Book.** Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Answer any **three** questions.
- 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 FOR CANDIDATES

This information is the same on the Printed Answer Book and the Question Paper.

- The number of marks is given in brackets [] at the end of each question or part question on the Question Paper.
- 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 being used.
- The total number of marks for this paper is **72**.
- The Printed Answer Book consists of **16** pages. The Question Paper consists of **4** pages. Any blank pages are indicated.

1(i)		
1(ii)(A)		
1(ii)(B)		

(answer space continued overleaf)

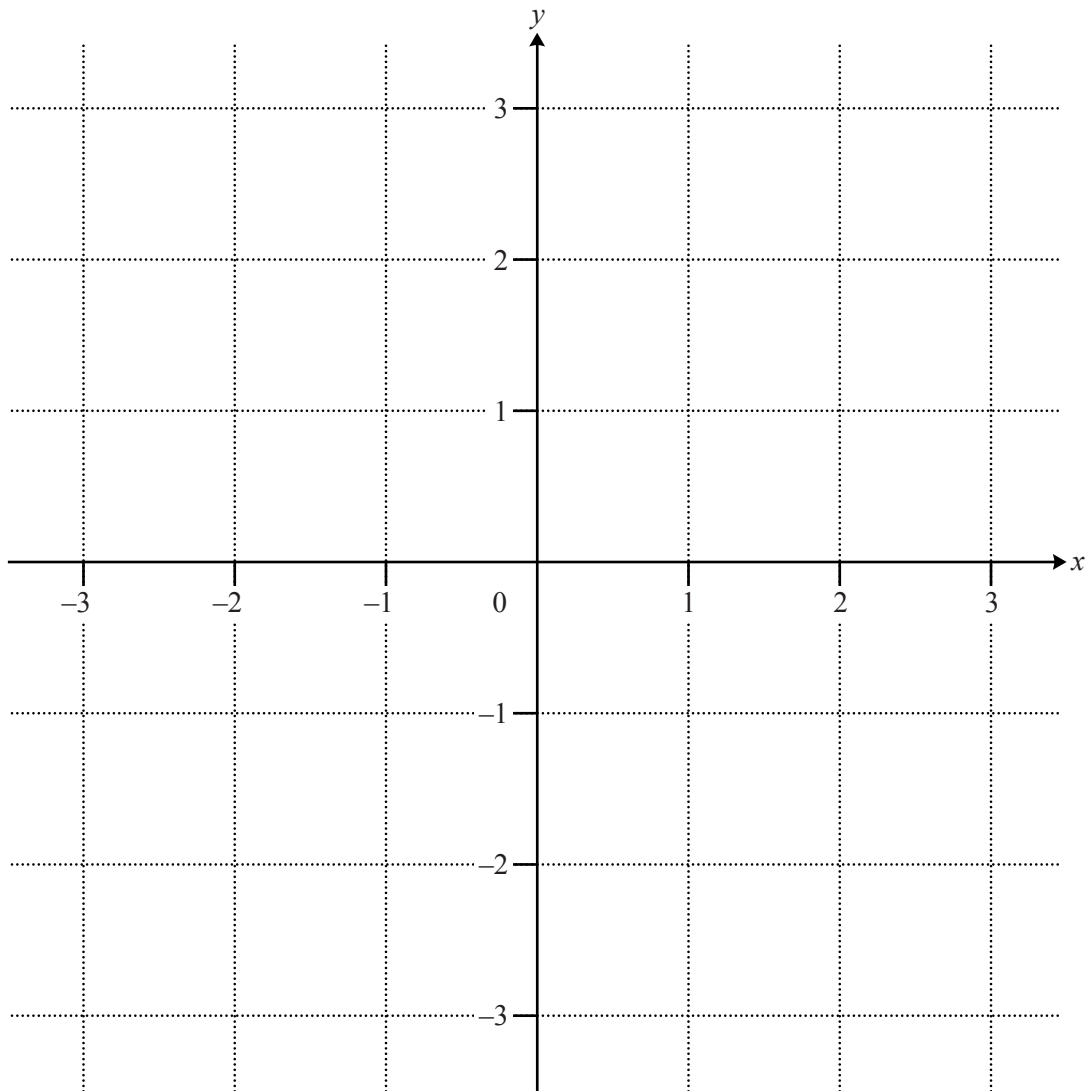
[illegible]

[illegible]

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3(i)
& (iii)



A spare copy of this diagram can be found on page 16.

3(ii)

3(iv)	

3(v)	
	3(vi)

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4(i) (continued)**(answer space continued overleaf)**

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

(answer space continued overleaf)

4(iv) (continued)

Spare copy of diagram for questions 3(i) and 3(iii)

