

Monday 19 May 2014 – Morning

AS GCE MATHEMATICS (MEI)

4751/01 Introduction to Advanced Mathematics (C1)

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

OCR supplied materials:

- Question Paper 4751/01 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other materials required:

None

Duration: 1 hour 30 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

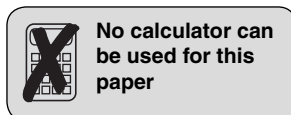
These instructions are the same on the Printed Answer Book and the Question Paper.

- The Question Paper will be found inside 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 **all** the questions.
- Do **not** write in the bar codes.
- You are **not** permitted to use a calculator in this paper.
- Final answers should be given to a degree of accuracy appropriate to the context.

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 **12** pages. The Question Paper consists of **8** pages. Any blank pages are indicated.



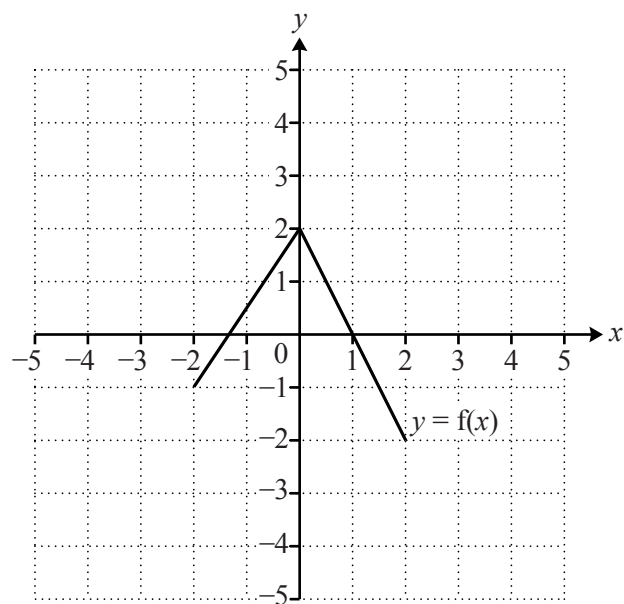
Section A (36 marks)

1 (i)

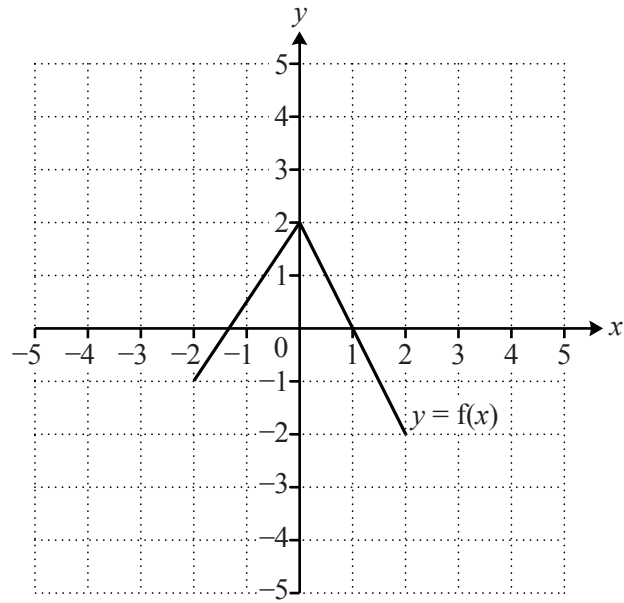
1 (ii)

2

3 (i)



3 (ii)



4 (i)

4 (ii)

5	
6	
7	

8	
9(i)	
9(ii)	

Section B (36 marks)

10 (i)	
10 (ii)	
10 (iii)	

10 (iv)	

11 (i)	
11 (ii)	
11 (iii)	

11 (iv)	

12 (i)

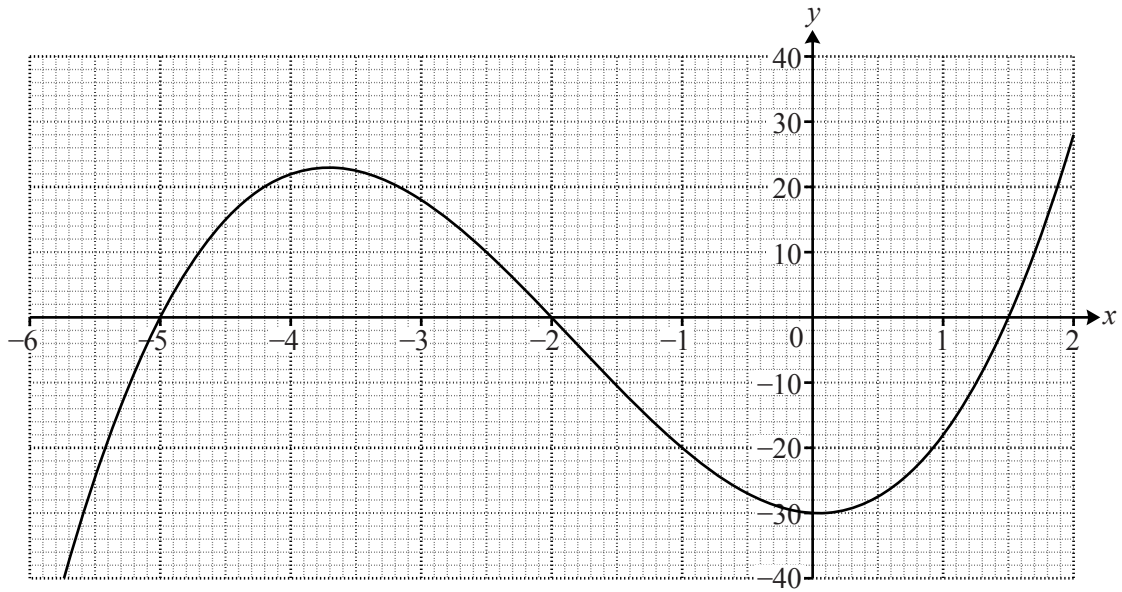
12 (ii)

12 (iii) A spare copy of this graph can be found on page 12.

The graph shows a cubic function plotted on a coordinate plane. The x-axis is labeled from -6 to 2, and the y-axis is labeled from -40 to 40. The curve passes through the x-axis at x = -5, x = -2, and x = 1. It has a local maximum at approximately (-3.5, 25) and a local minimum at approximately (0.5, -30).

12 (iv)	

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



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