

Monday 23 January 2012 – Morning

AS GCE MATHEMATICS (MEI)

4771 Decision Mathematics 1

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

OCR supplied materials:

- Question Paper 4771 (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 **all** the questions.
- Do **not** write in the bar codes.
- You are permitted to use a graphical 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.

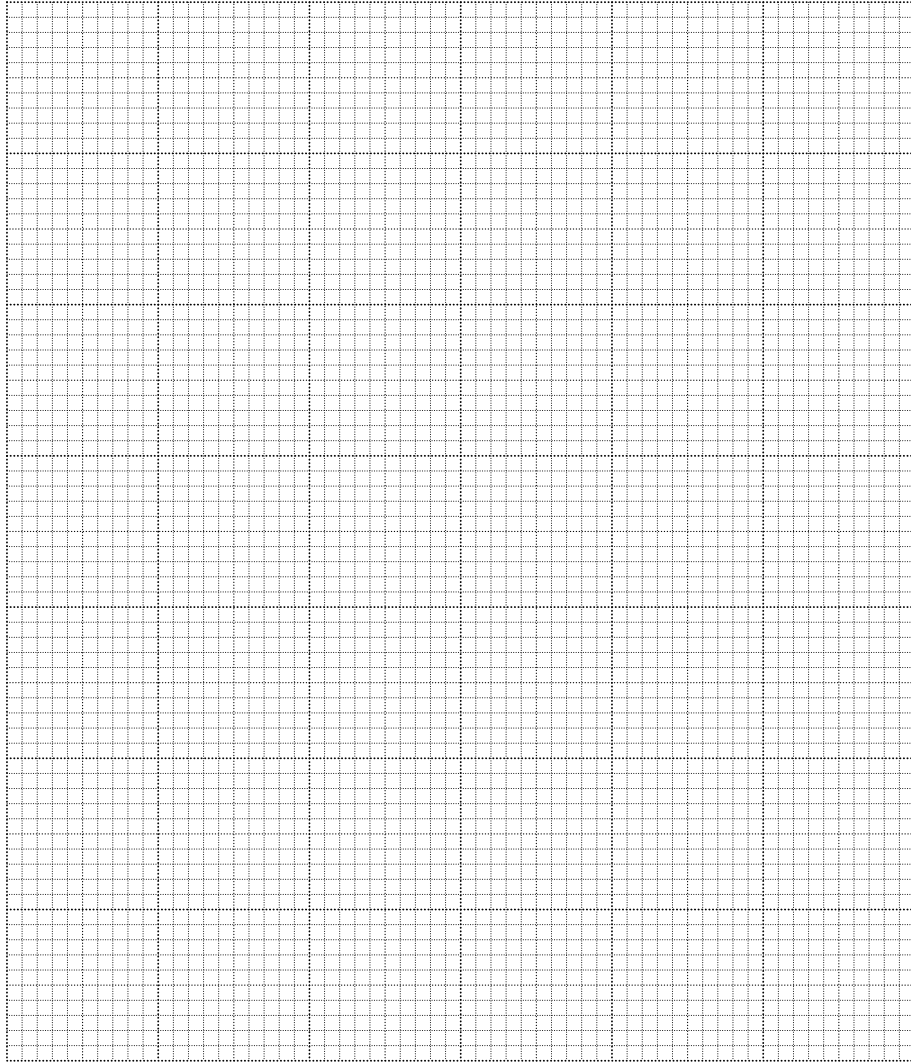
- The number of marks is given in brackets [] at the end of each question or part question on the Question Paper.
- You are advised that an answer may receive **no marks** unless you show sufficient detail of the working to indicate that a correct method is being used.
- The total number of marks for 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 (24 marks)

1 (i)	
1 (ii)	

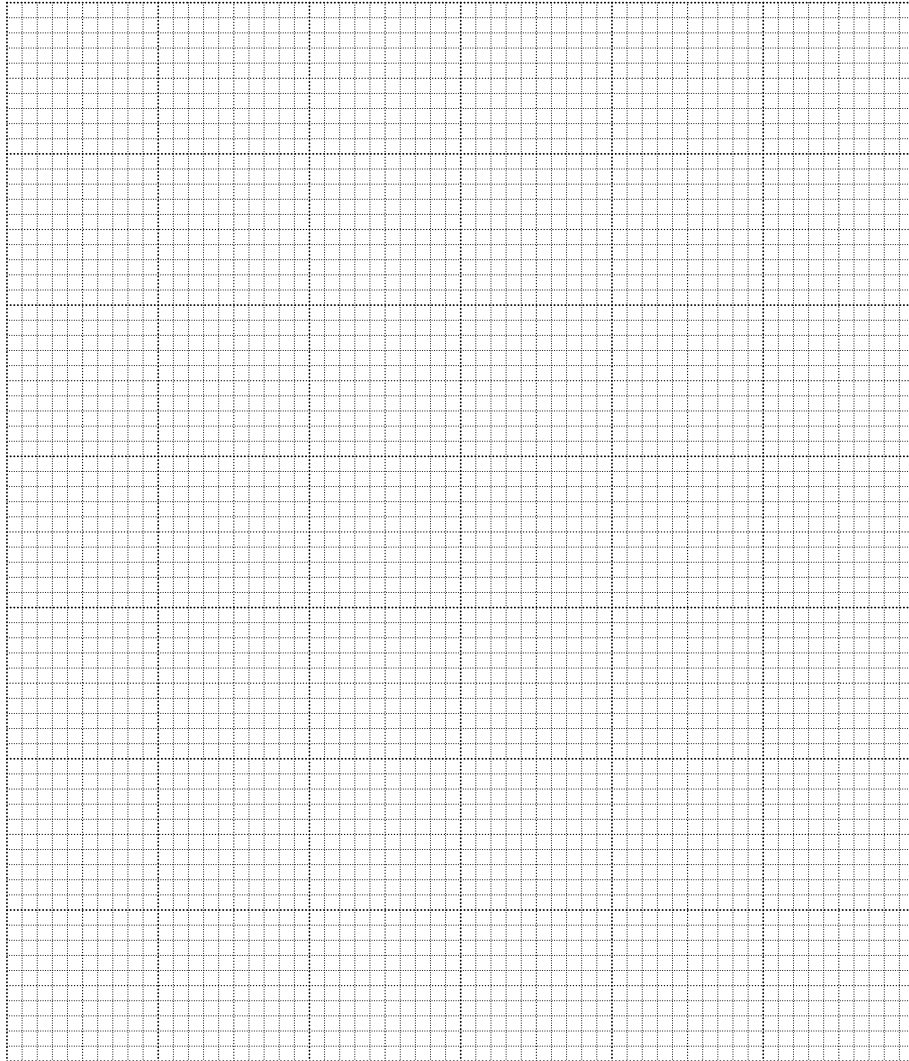
2 (i)	
2 (ii)	
2 (iii)	

3



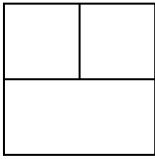
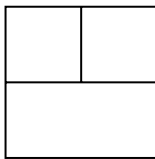
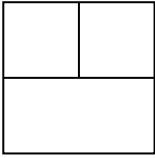
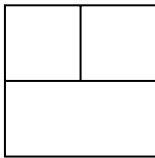
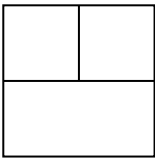
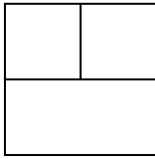
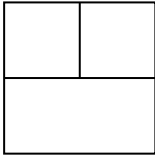
A spare copy of this graph paper can be found on page 5.

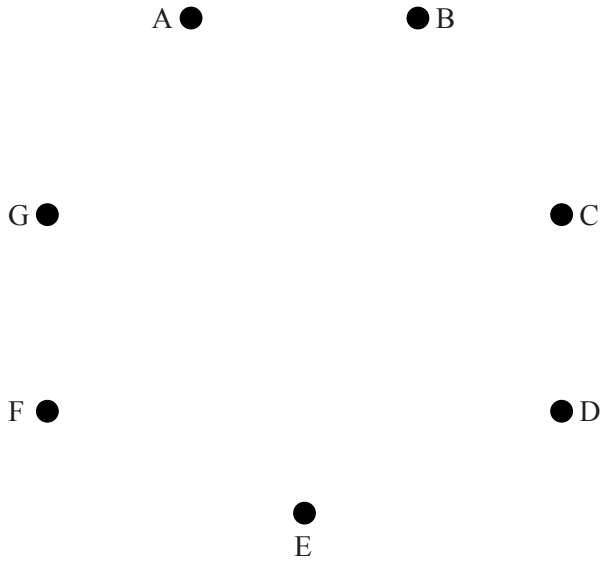
Spare copy of graph paper for question 3.



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Section B (48 marks)

4 (i) & (ii)	 A ● ● B   G ● ● C   F ● ● D  ● E 
4 (iii)	A ● ● B G ● ● C F ● ● D ● E
Total length of edges:	

4 (iv)	 A ● ● B G ● ● C F ● ● D ● E Total length of edges:
4 (v)	

One-digit random numbers:

3 3 7 5 2 9 3 0 6 2 4 9 0 6 2 7 2 2 1 6
8 2 3 6 4 8 0 2 9 1 7 5 2 3 0 8 7 0 6 7

5 (i)

5 (ii)

5 (iii)

5 (iv)	

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6 (i) &
(ii)

6 (iii)																																									
6 (iv)	<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																																								

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