

**ADVANCED SUBSIDIARY GCE
MATHEMATICS (MEI)**

Decision Mathematics 1

4771

PRINTED ANSWER BOOK

Candidates answer on the printed answer book.

OCR supplied materials:

- Question paper 4771 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other materials required:

- Scientific or graphical calculator

**Wednesday 22 June 2011
Morning**

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. 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.

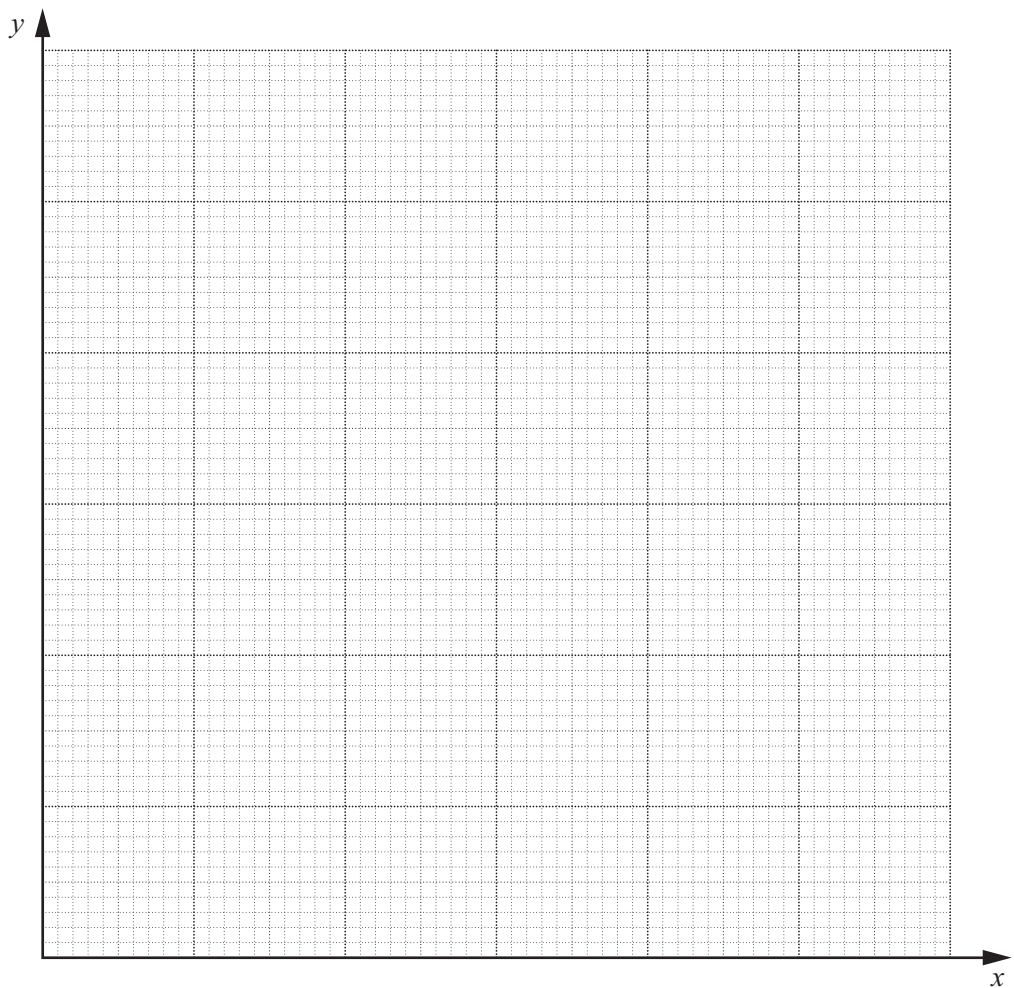
INFORMATION FOR CANDIDATES

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)	number of pairs of shoes 5 ● 4 ● 3 ● 2 ● 1 ● 0 ● ● 5 ● 4 ● 3 ● 2 ● 1 ● 0 number of people
1 (ii)	
1 (iii)	
1 (iv)	
1 (v)	

2 (i)

2 (ii)

3 (i)

x	1	2	3
Probability($X = x$)	$\frac{1}{2}$	$\frac{1}{6}$	$\frac{1}{3}$

3 (ii)

y	1	2	3
Probability($Y = y$)	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$

3 (iii)	

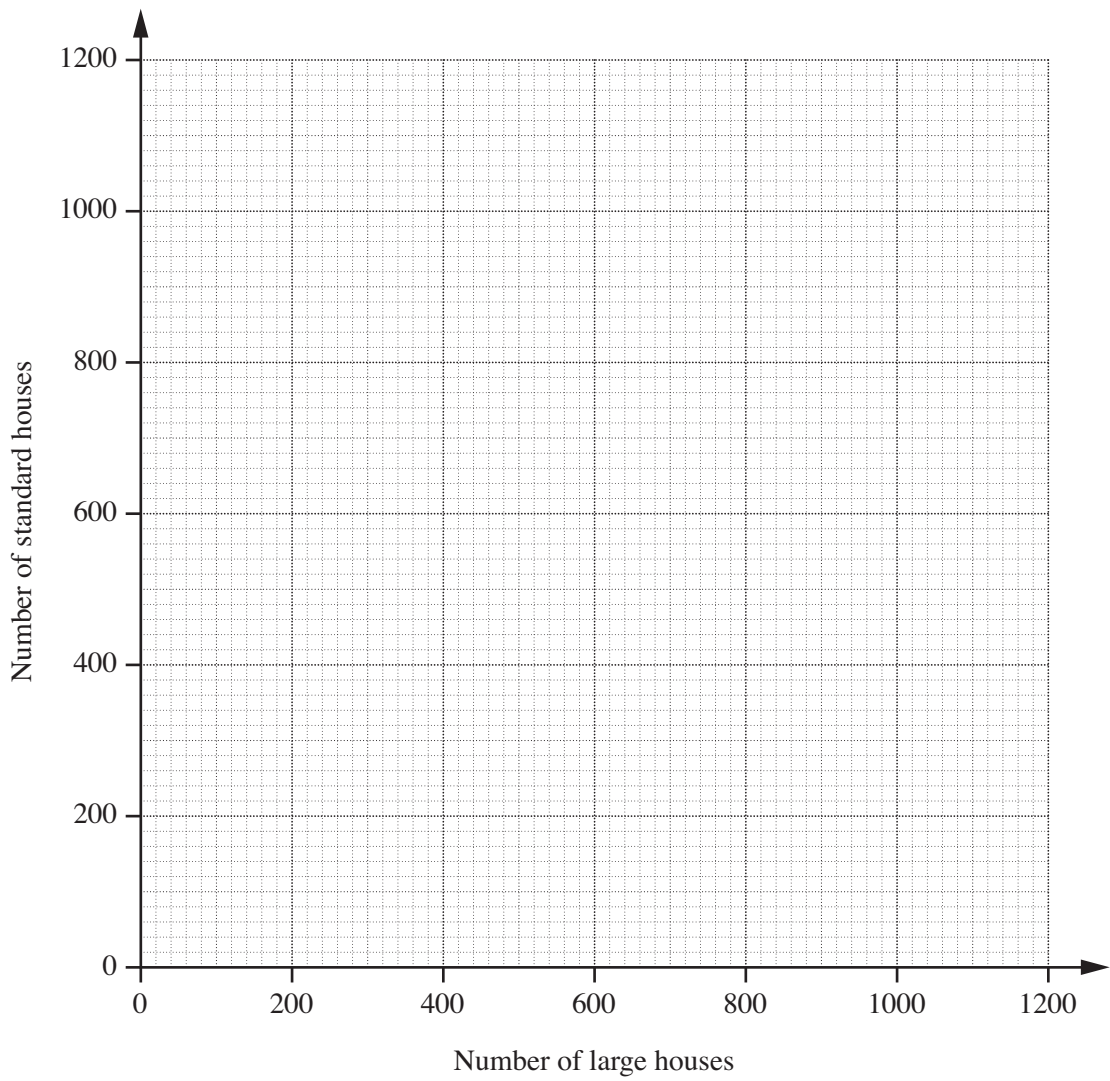
PLEASE DO NOT WRITE ON THIS SPACE

6

Section B (48 marks)

4 (i)

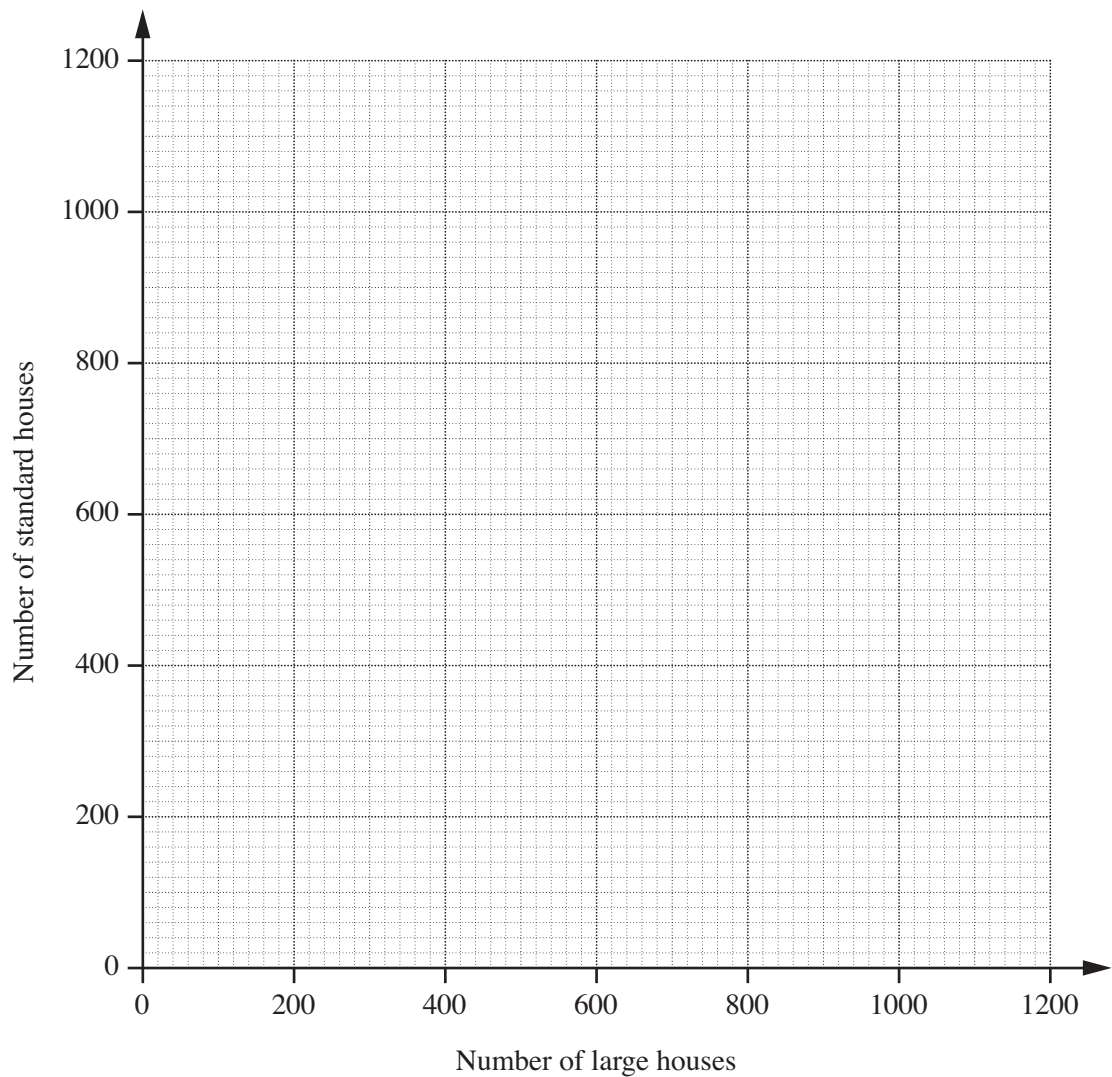
4 (ii)



4 (iii)

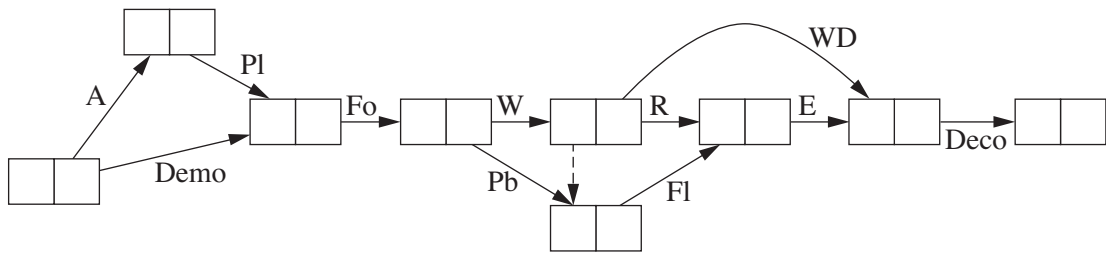
4 (iv)

4 (ii) SPARE COPY OF GRAPH PAPER



5 (i)

Activity	Immediate predecessor(s)
A	
Pl	
Demo	
Fo	
W	
Pb	
R	
Fl	
E	
WD	
Deco	

5 (ii)**5 (iii)**

task: A Pl Demo Fo W Pb R Fl E WD Deco

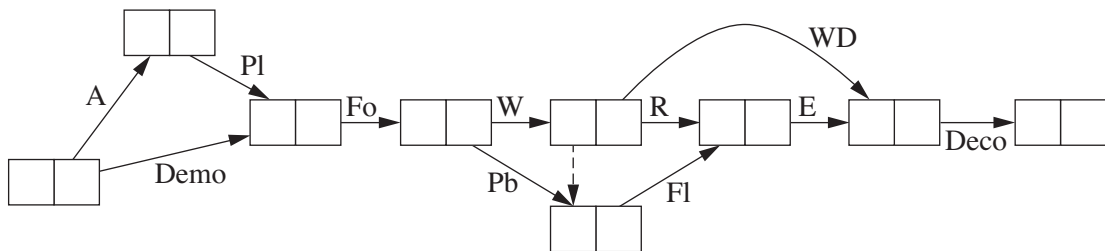
float:

5 (iv)

5 (v)

5 (vi)

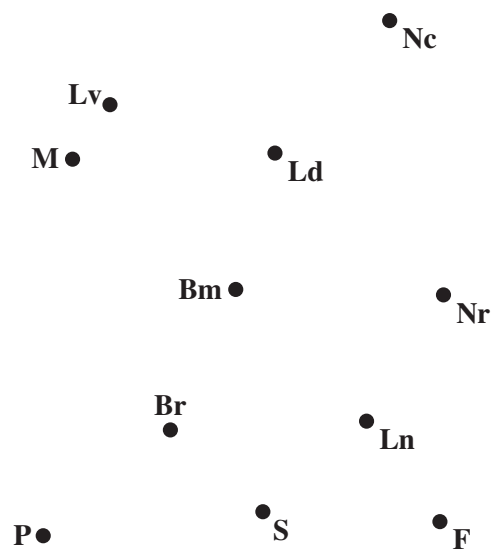
5 (ii) SPARE COPY OF ACTIVITY NETWORK



6 (i)

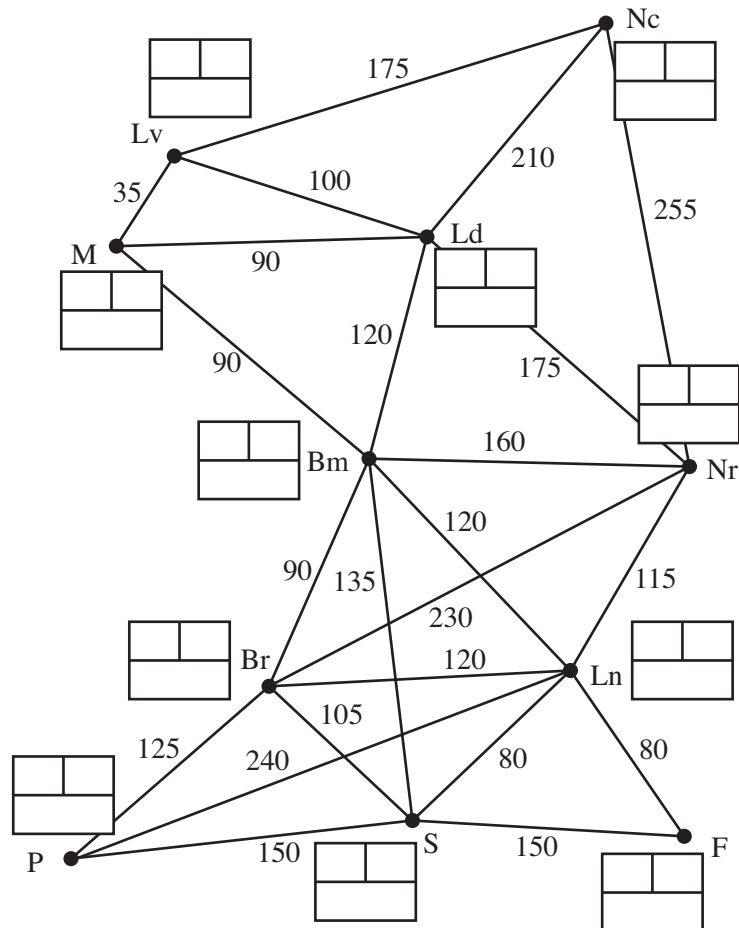
	P	S	F	Ln	Br	Nr	Bm	Ld	Nc	Lv	M
P	–	150	–	240	125	–	–	–	–	–	–
S	150	–	150	80	105	–	135	–	–	–	–
F	–	150	–	80	–	–	–	–	–	–	–
Ln	240	80	80	–	120	115	120	–	–	–	–
Br	125	105	–	120	–	230	90	–	–	–	–
Nr	–	–	–	115	230	–	160	175	255	–	–
Bm	–	135	–	120	90	160	–	120	–	–	90
Ld	–	–	–	–	–	175	120	–	210	100	90
Nc	–	–	–	–	–	255	–	210	–	175	–
Lv	–	–	–	–	–	–	–	100	175	–	35
M	–	–	–	–	–	–	90	90	–	35	–

Min connector



6 (ii)

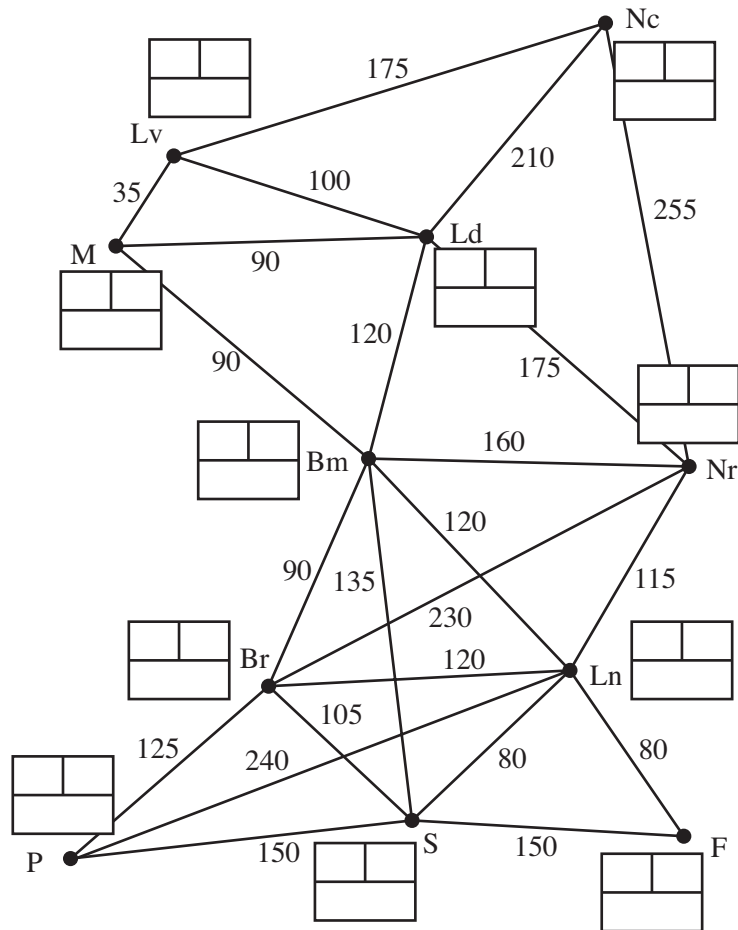
6 (iii)



THERE IS A SPARE COPY OF THIS NETWORK ON PAGE 12.

6 (iv)

6 (iii) SPARE COPY OF NETWORK

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