

**ADVANCED SUBSIDIARY GCE
MATHEMATICS (MEI)**
Decision Mathematics 1

4771

PRINTED ANSWER BOOK

Candidates answer on the Printed Answer Book

OCR Supplied Materials:

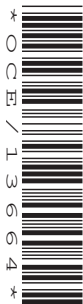
- Question Paper 4771 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other Materials Required:

- Scientific or graphical calculator

**Tuesday 22 June 2010
Afternoon**

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.

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the spaces provided on the Printed Answer Book.
- **The questions are on the inserted Question Paper.**
- **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 and make sure that 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.

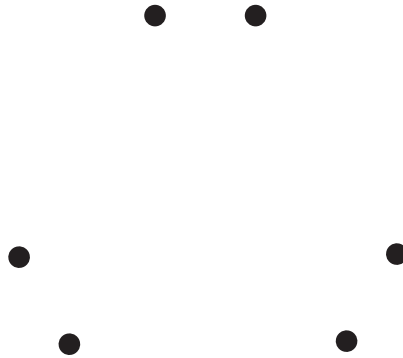
- The number of marks is given in brackets [] at the end of each question or part question on the Question Paper.
- You are advised that an answer may receive **no marks** unless you show sufficient detail of the working to indicate that a correct method is being used.
- The total number of marks for this paper is **72**.
- The Printed Answer Book consists of **12** pages. The Question Paper consists of **8** pages. Any blank pages are indicated.

BLANK PAGE

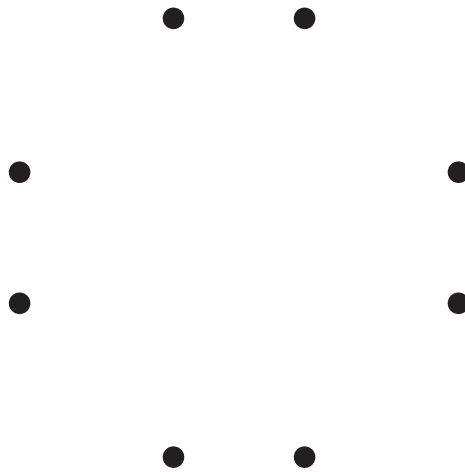
PLEASE DO NOT WRITE ON THIS PAGE

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| 2 (i) | Left-hand number | Right-hand number |
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| | | Result = |
| 2 (ii) | Left-hand number | Right-hand number |
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| | | Result = |
| 2 (iii) | | |
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3 (i)



3 (ii)



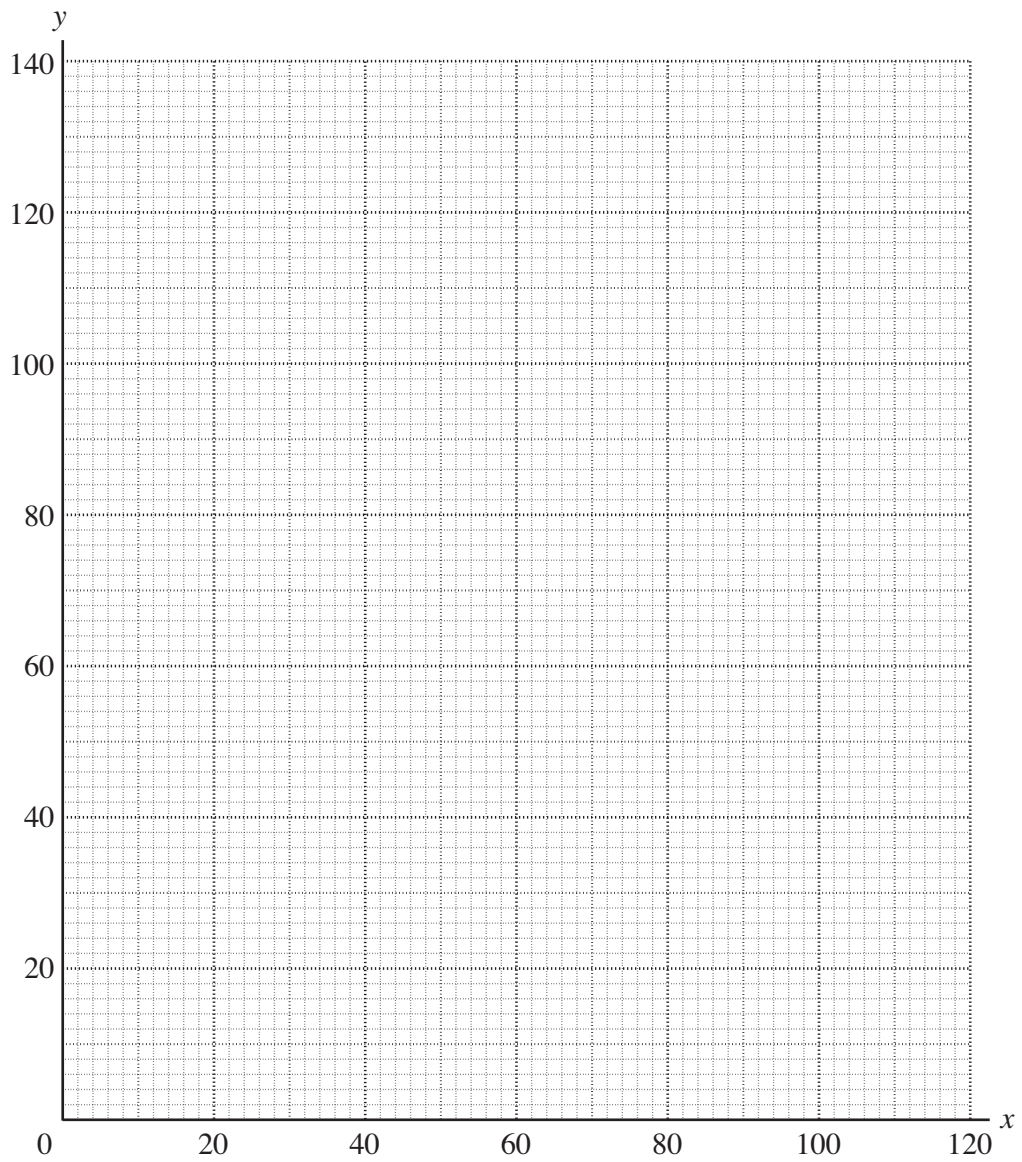
3 (iii)

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4 (i)

4 (ii)

4 (iii)



THERE IS A SPARE COPY OF THIS GRAPH PAPER ON PAGE 12

| | |
|--------------|--|
| 5 (i) | |
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| 5 (ii) | Random digits: | |
| | 9 1 4 8 0 2 | |
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| 5 (iii) | |
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| 5 (iv) | |
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5 (v)

Random digits:

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| run 1 | 4 | 2 | 7 | 2 | 0 | 4 | 5 | 3 | 9 | 7 |
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| run 2 | 6 | 9 | 2 | 9 | 3 | 5 | 0 | 5 | 4 | 1 |
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| run 3 | 7 | 4 | 1 | 2 | 1 | 2 | 1 | 8 | 6 | 8 |
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| run 4 | 1 | 0 | 4 | 0 | 3 | 8 | 0 | 4 | 9 | 2 |
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| run 5 | 5 | 6 | 6 | 7 | 7 | 6 | 0 | 1 | 2 | 9 |
|-------|---|---|---|---|---|---|---|---|---|---|

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| run 6 | 1 | 3 | 3 | 9 | 6 | 9 | 6 | 3 | 8 | 5 |
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| run 7 | 5 | 8 | 1 | 5 | 4 | 5 | 0 | 2 | 7 | 6 |
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| run 8 | 7 | 6 | 0 | 8 | 5 | 6 | 2 | 9 | 0 | 0 |
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| run 9 | 4 | 9 | 8 | 9 | 6 | 7 | 4 | 2 | 0 | 8 |
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| run 10 | 1 | 4 | 5 | 2 | 6 | 6 | 1 | 5 | 9 | 8 |
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| run 1 | | | | | | | | | | |
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| run 2 | | | | | | | | | | |
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| run 3 | | | | | | | | | | |
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| run 4 | | | | | | | | | | |
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| run 5 | | | | | | | | | | |
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| run 6 | | | | | | | | | | |
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| run 7 | | | | | | | | | | |
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| run 8 | | | | | | | | | | |
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| run 9 | | | | | | | | | | |
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| run 10 | | | | | | | | | | |
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Estimate of probability =

6 (i) &
(ii)

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| 0 | 0 |
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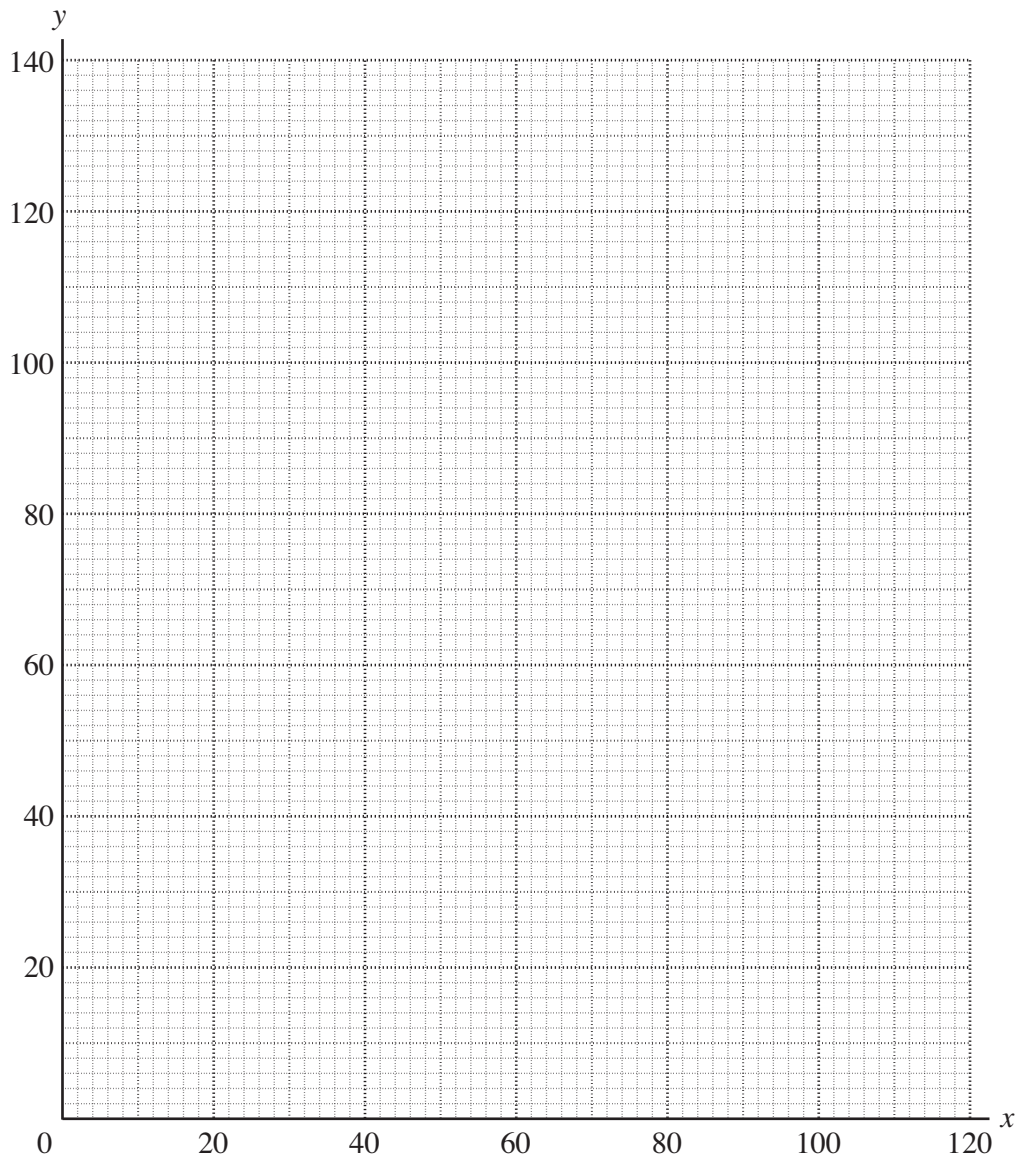
Project duration: _____

Critical activities: _____

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| 6 (iii) | |
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| 6 (iv) | |
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