

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS
AS GCE**

4736/01

MATHEMATICS

Decision Mathematics 1

PRINTED ANSWER BOOK

TUESDAY 10 JUNE 2014: Morning

**DURATION: 1 hour 30 minutes
plus your additional time allowance**

MODIFIED ENLARGED

Candidate forename		Candidate surname	
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Centre number						Candidate number				
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Candidates answer on this Printed Answer Book.

OCR SUPPLIED MATERIALS:

**Question Paper 4736/01 (inserted)
List of Formulae (MF1)**

OTHER MATERIALS REQUIRED:

Scientific or graphical calculator

READ INSTRUCTIONS OVERLEAF

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.

Answer ALL the questions.

Read each question carefully. Make sure you know what you have to do before starting your answer.

You are permitted to use a scientific or graphical calculator in this paper.

Give non-exact numerical answers correct to 3 significant figures unless a different degree of accuracy is specified in the question or is clearly appropriate.

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 REMINDED OF THE NEED FOR CLEAR PRESENTATION IN YOUR ANSWERS.

The total number of marks for this paper is 72.

Any blank pages are indicated.

1 (i)	120 120 120 100 150 200 250 150 200 250 120

1 (ii)	

1 (iii)	

2 (i) (a)	

2 (i) (b)	

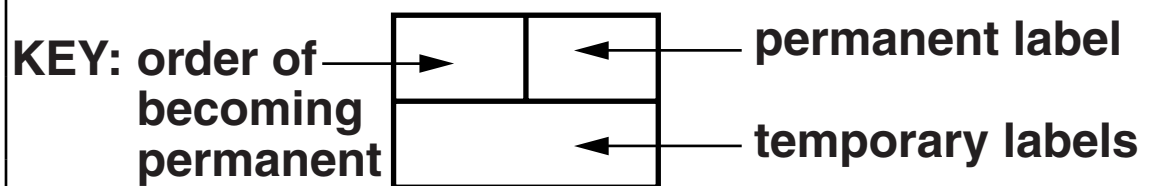
2(ii)	
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3(i)	Line	<i>N</i>	<i>C</i>	<i>X</i>	<i>Y</i>	Print
	10					
	20					
	40					

3(ii)	Line	<i>N</i>	<i>C</i>	<i>X</i>	<i>Y</i>	Print
	10					
	20					
	40					

3 (iii)	
3 (iv)	

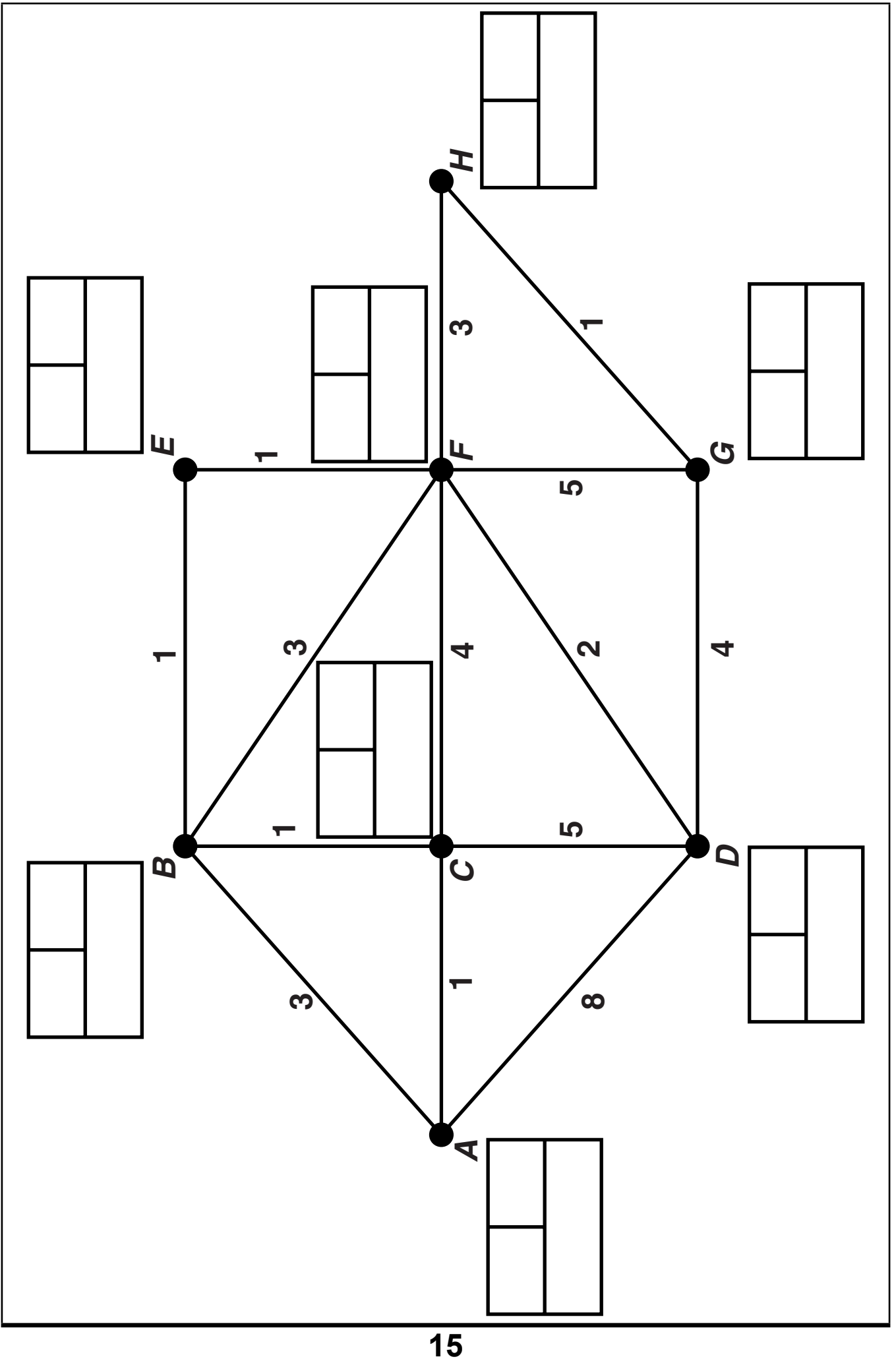
- 4 (i) A spare copy of the diagram opposite can be found on page 31.



Do not cross out your working values
(temporary labels)

Shortest distances from A (in metres)

<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>



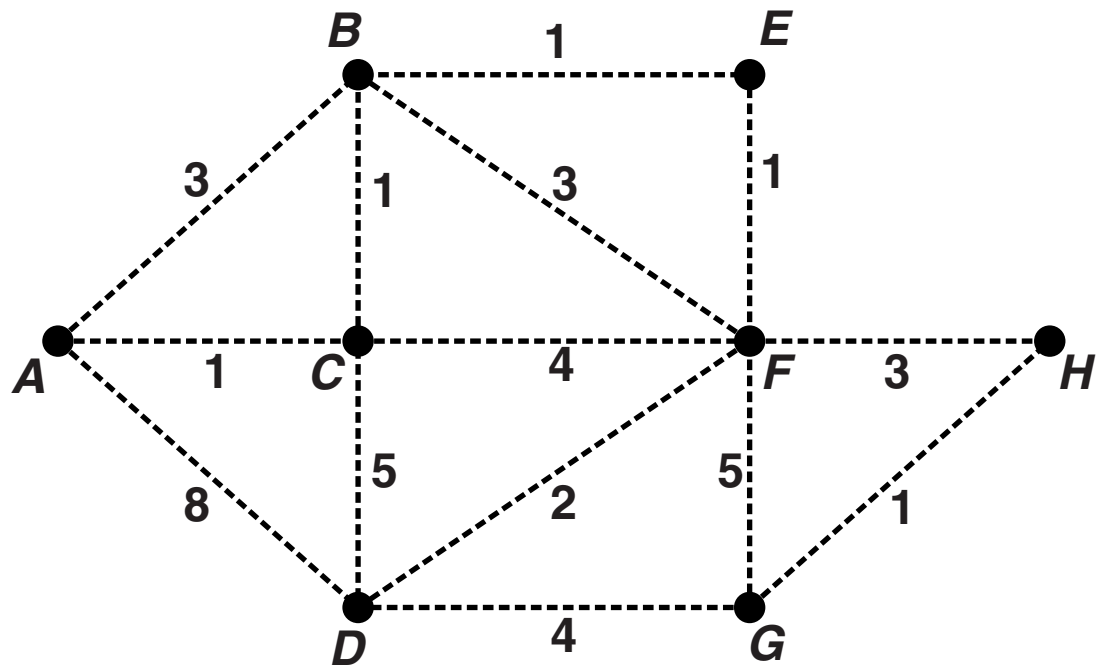
4 (ii)	
4 (iii)	

4 (iv)	

5 (i) (a)	
5 (i) (b)	

BLANK PAGE

5(ii) A spare copy of this diagram can be found on page 32.



5 (iii) (a)	
5 (iii) (b)	

5(iv)	
5(v)	

5 (vi)	

PLEASE DO NOT WRITE IN THIS SPACE

6 (i)	
6 (ii)	

6 (iii)	
6 (iv)	

PLEASE DO NOT WRITE IN THIS SPACE

6(v)

Initial tableau

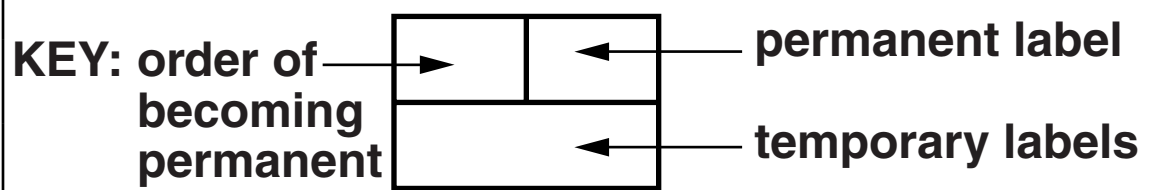
P	a	b	c	s	t	u	v	RHS	
1	-8	-7	-4	0	0	0	0	0	row 1
0	10	8	5	1	0	0	0	400	row 2
0	0	2	5	0	1	0	0	70	row 3
0	2	4	1	0	0	1	0	176	row 4
0	5	1	3	0	0	0	1	80	row 5

After one iteration									
P	a	b	c	s	t	u	v	RHS	
									row 1'
									row 2'
									row 3'
									row 4'
									row 5'
row 1' =									
row 2' =									
row 3' =									
row 4' =									
row 5' =									

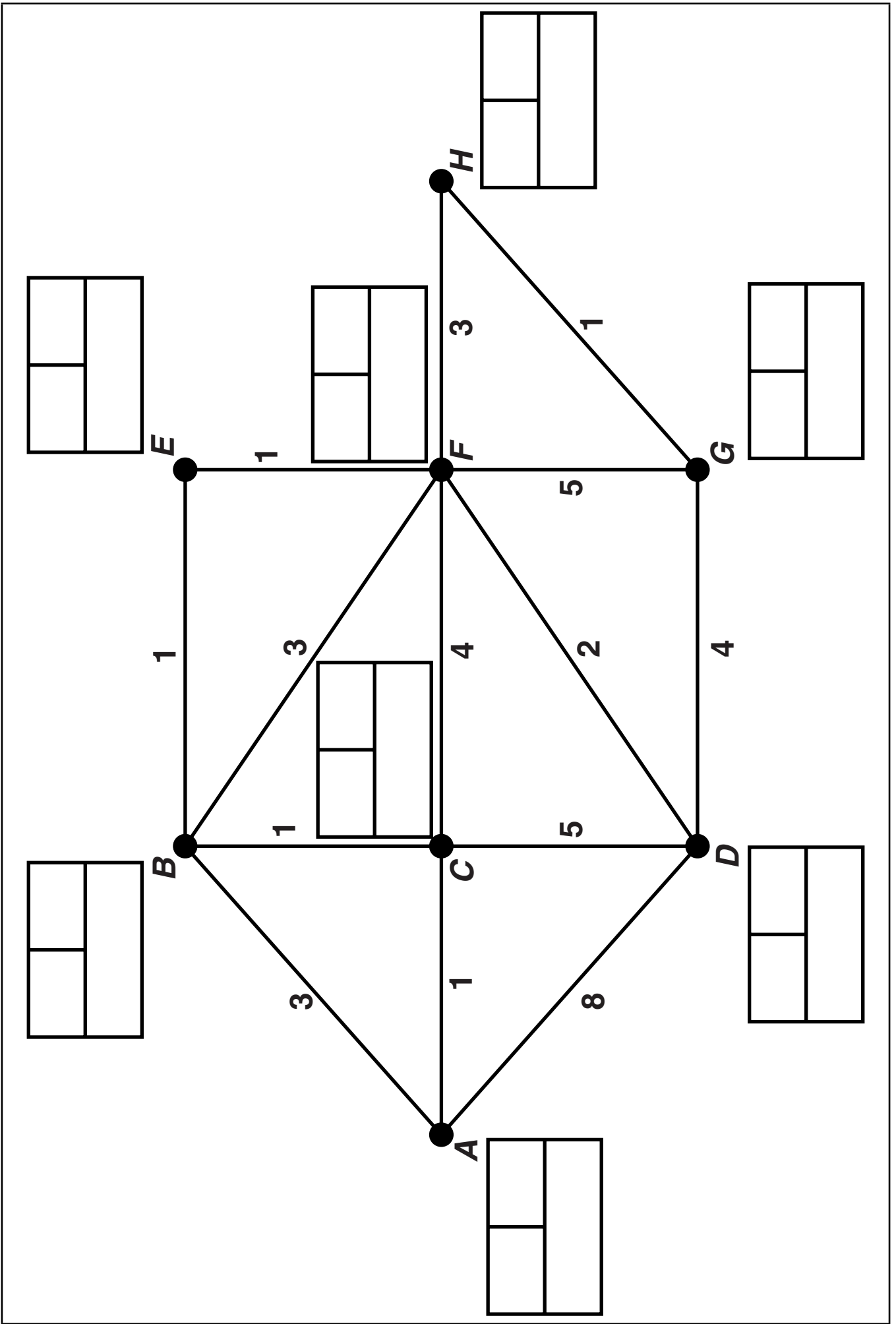
6 (vi)	
6 (vii)	
6 (viii)	

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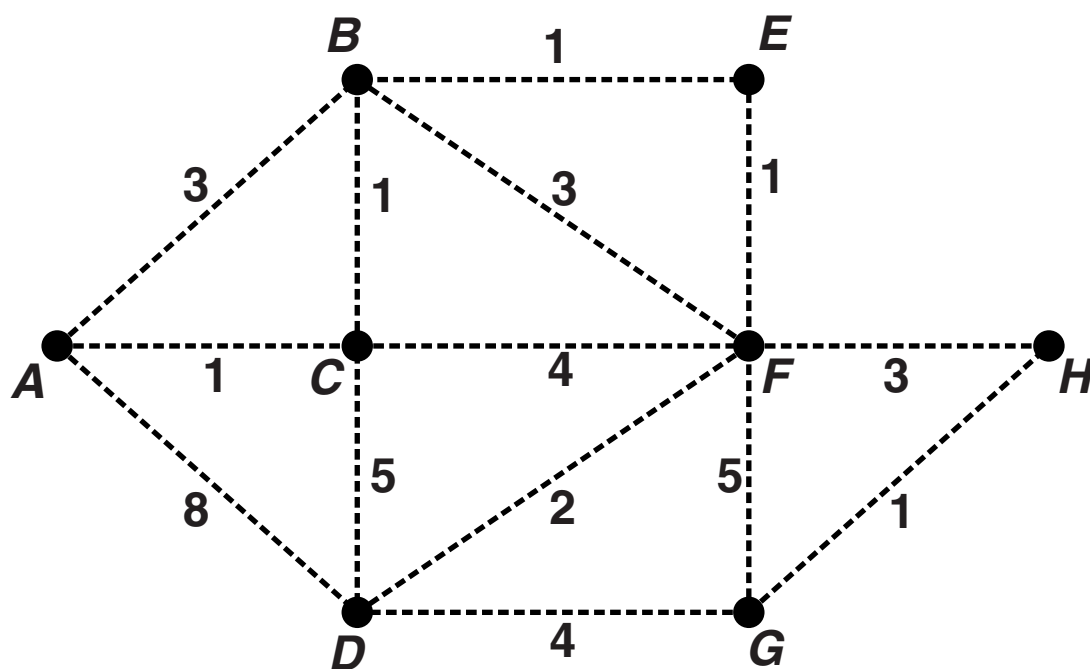
4 (i) Spare copy opposite of diagram for question 4(i)



**Do not cross out your working values
(temporary labels)**



5(ii) Spare copy of diagram for question 5(ii)



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