

Further Mathematics
Advanced Subsidiary
Further Mathematics options
27: Decision Mathematics 1
(Part of options D, F, H and K)

Thursday 16 May 2019 – Afternoon

Diagram Book

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

INSTRUCTIONS

There are two copies of each diagram in case you need them.

**THIS DIAGRAM BOOK MUST BE RETURNED WITH THE
ANSWER BOOK AT THE END OF THE EXAMINATION.**

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Question 2

Step 1	Start
Step 2	Input the values of A, B and N
Step 3	Let $H = (B - A) / N$
Step 4	Let $C = H / 2$
Step 5	Let $D = 0$
Step 6	Let $D = D + A^4 + B^4$
Step 7	Let $E = A$
Step 8	Let $E = E + H$
Step 9	If $E = B$ go to Step 12
Step 10	Let $D = D + 2 \times E^4$
Step 11	Go to Step 8
Step 12	Let $F = C \times D$
Step 13	Output F
Step 14	Stop

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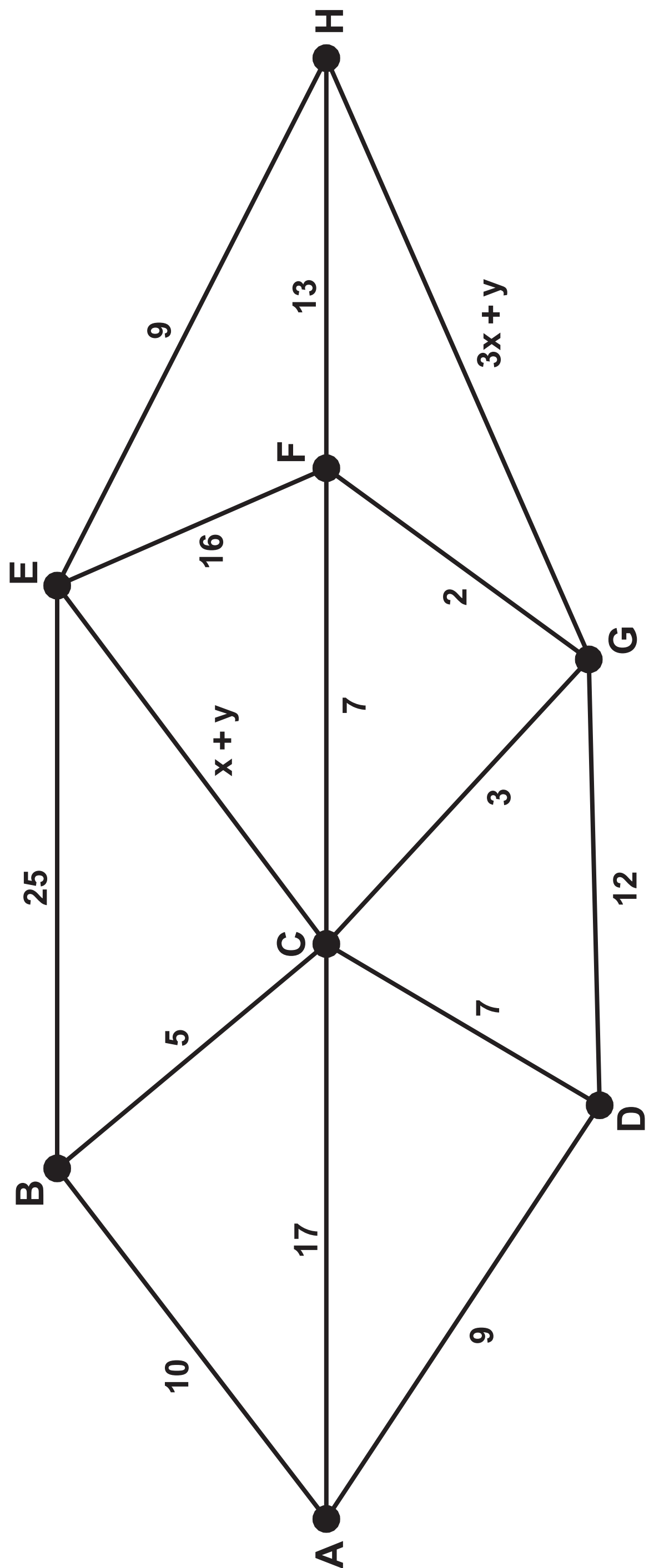
Question 3

Activity	Immediately preceding activities
A	–
B	–
C	A
D	A
E	A
F	B, C
G	B, C
H	D
I	D, E, F, G
J	D, E, F, G
K	G

Question 3

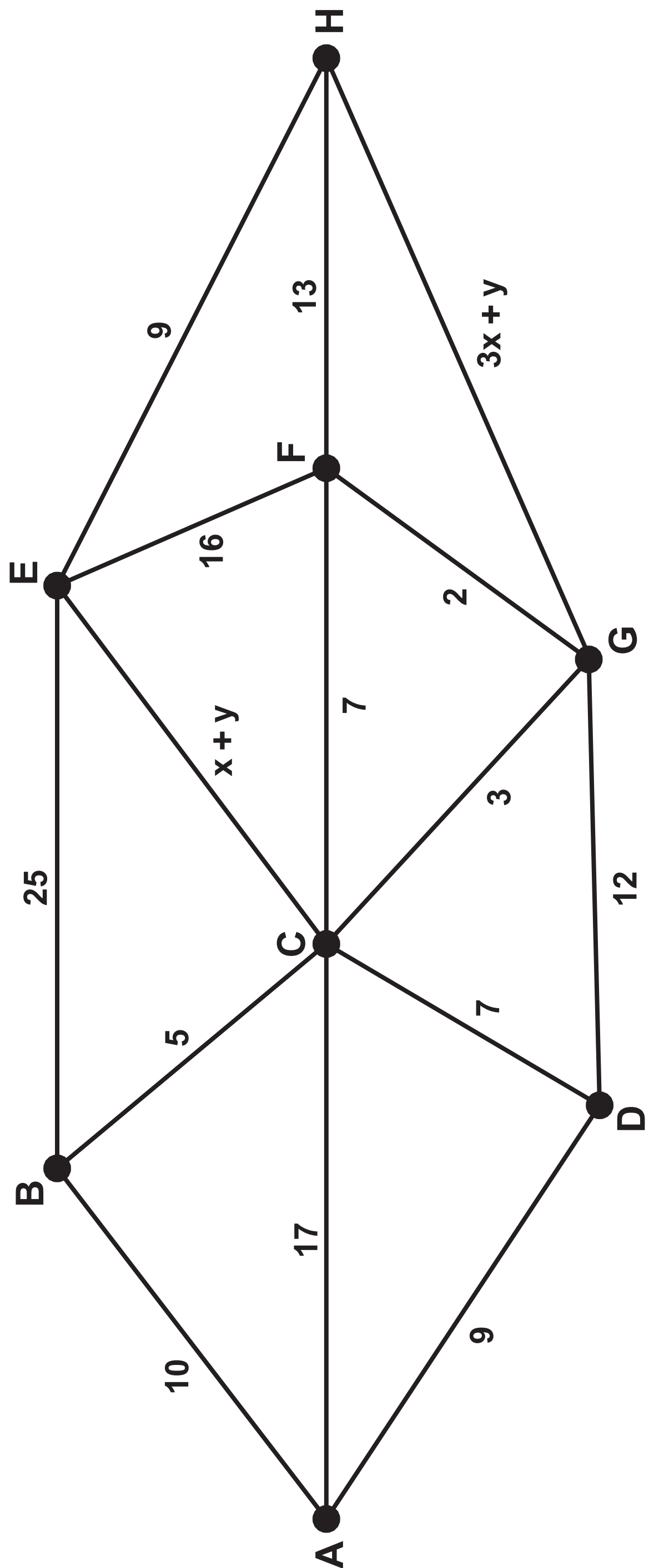
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A	–
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G	B, C
H	D
I	D, E, F, G
J	D, E, F, G
K	G

Figure 1



[The total weight of the network is $135 + 4x + 2y$]

Figure 1



[The total weight of the network is $135 + 4x + 2y$]