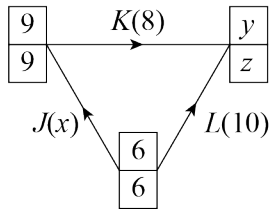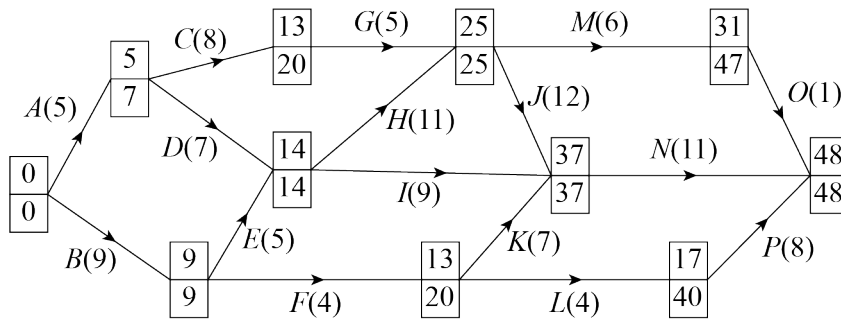# Decision Maths 1   Solution Bank

Exercise 6E

1

Activity J is critical, therefore $x = 9 - 6 = 3$
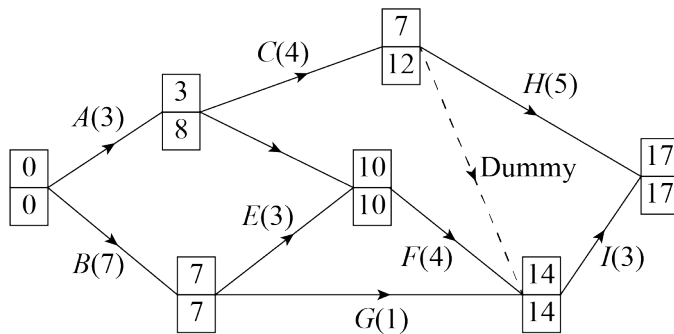Activity K is critical, therefore $y = z = 9 + 8 = 17$

2 a

Since a critical activity has a total float of 0 the critical activities are:
B, E, H, J and N

b I, even though it connects two critical events, the duration of I can be increased by up to 14 hours without affecting the total time.

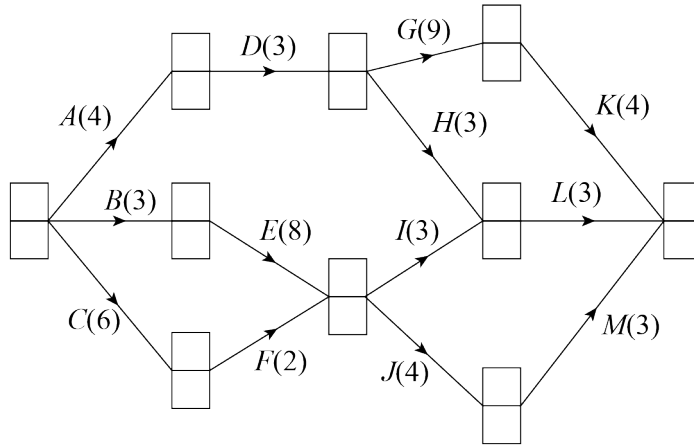**3 a** The total duration of the project is 17, therefore

b $7 + 1 \neq 14$

c Since a critical activity has a total float of 0 the critical activities are:
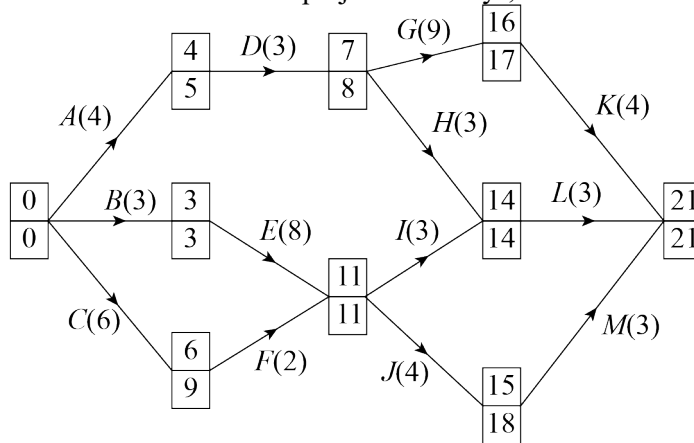B, E, F and I
So the critical path is $B - E - F - I$ which has length 17 days.

4   a

Activity	Depends on
A	–
B	–
C	–
D	A
E	B
F	C
G	D
H	D
I	E, F
J	E, F
K	G
L	H, I
M	J

4 b The total duration of the project is 21 days, therefore

c Since a critical activity has a total float of 0 the critical activities are:
B, E, I and L
So the critical path is $B - E - I - L$ which has length 21 days