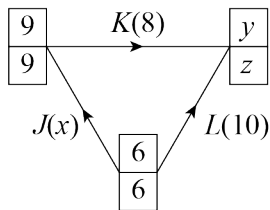


Exercise 6E

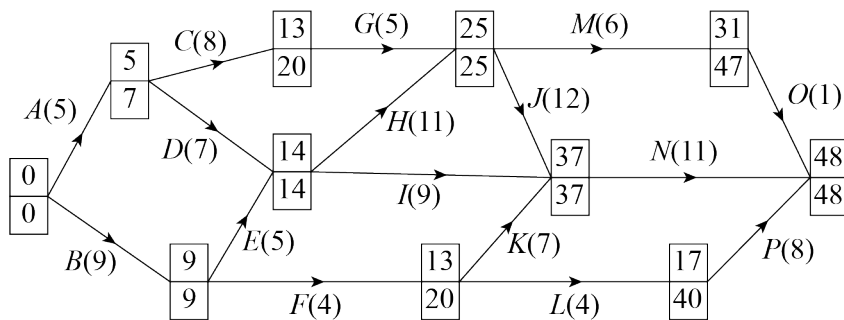
1



Activity J is critical, therefore $x = 9 - 6 = 3$

Activity K is critical, therefore $y = z = 9 + 8 = 17$

2 a

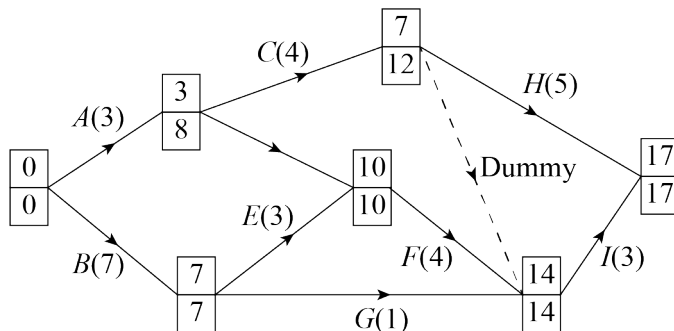


Since a critical activity has a total float of 0 the critical activities are:

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



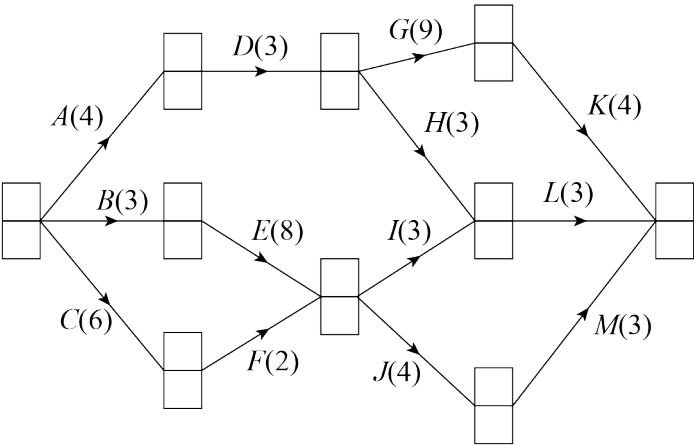
b $7 + 1 \neq 14$

c Since a critical activity has a total float of 0 the critical activities are:

B, E, F and I

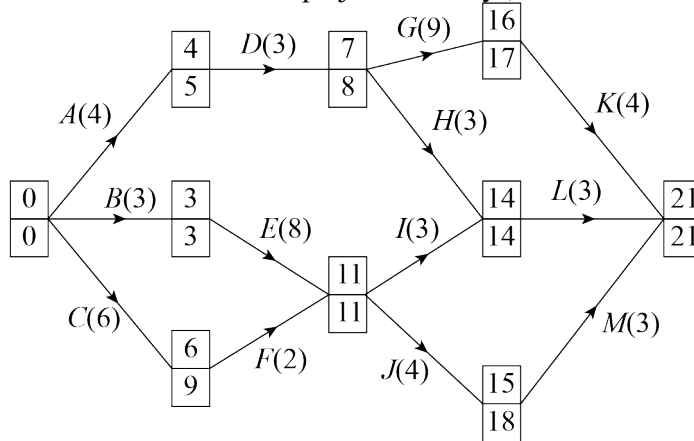
So the critical path is $B - E - F - I$ which has length 17 days.

4 a



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

- 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