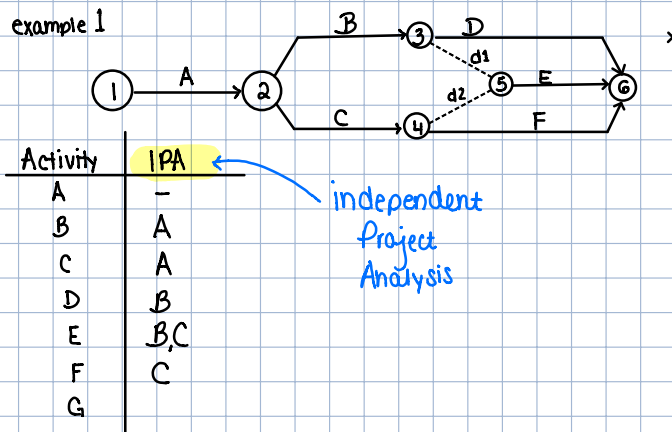


example 1



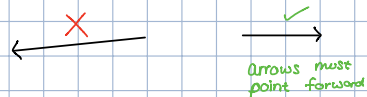
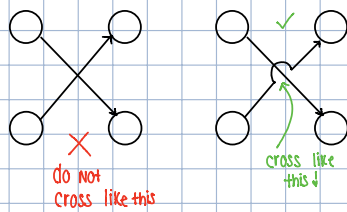
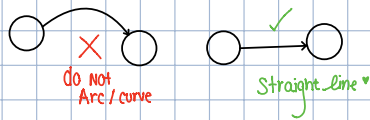
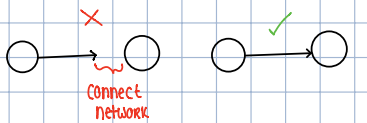
Activity	IPA
A	-
B	A
C	A
D	B
E	B, C
F	C
G	

independent Project Analysis

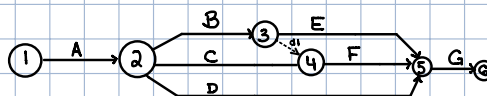
★ minimize the amount of dummy activities

2 Qs

1. AOA Example
2. CPM Optimization



Activity	IPA
A	-
B	A
C	A
D	A
E	B
F	B, C
G	D, E, F



Example 3.6

Draw the arrow network for the project given next.

Activity	IPA
A	—
B	—
C	—
D	A
E	A, B
F	A, B, C

Solution

Again, the solution also requires two dummies as in Figure 3.6.

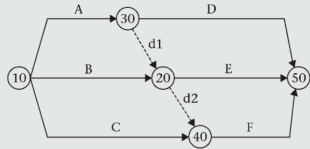


Figure 3.6 Solution for example 3.6

Example 3.4

Draw the arrow network for the project given next.

Activity	IPA
A	—
B	A
C	A
D	B
E	B, C
F	C

Solution

The solution requires two dummy activities (or simply *dummies*) (Figure 3.4).

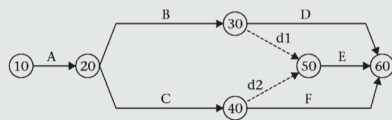


Figure 3.4 Solution for example 3.4

Example 4.2

Draw the node diagram and perform the CPM computations for the schedule shown next.

Activity	IPA	Duration
A	—	2
B	A	6
C	A	10
D	A	4
E	B	7
F	B, C	5
G	C, D	3
H	E, F	5
I	G, H	2

Solutions

Performing forward and backward passes yields the solution shown in Figure 4.6. The critical path is A, C, F, H, I. Activities B, D, E, and G have total floats equal to 2, 13, 2, and 7, respectively.

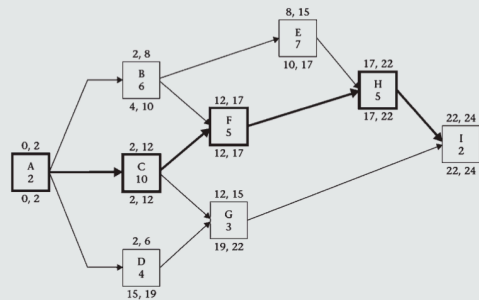
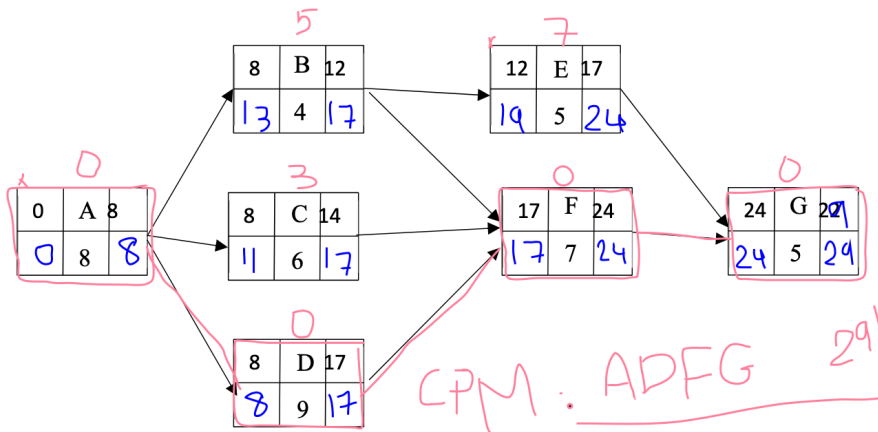


Figure 4.6 Node diagram for example 4.2

CPM

For the following schedule network, perform the CPM calculations including total floats, and identify critical path(es).



Practice.pdf

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ZOOM

B	Start	2
C	Start	6
D	A	10
E	B, C	1
F	C	2
G	D	3
H	E	9
I	F	1
End	G, H, I	0

Answer:

Paths	Duration in Weeks
Start, A, D, G, End	14 = 1 + 10 + 3
Start, B, E, H, End	12
Start, C, E, H, End	16
Start, C, F, I, End	9

