

The Extra Questions are: Ex **6**, **7** and **12**. In Text Book. page.104  
 Note: (there are some changes in exercise 7 will discuss in class time)

The Model Answers are the following:

6.The expected times for this exercise are summarized in the following table.

**Problems and Exercises 6  
 Expected Times Summary Table**

Task	Expected Time
A	7
B	9
C	3
D	5
E	6
F	5
G	4
H	4
I	5
J	6.83

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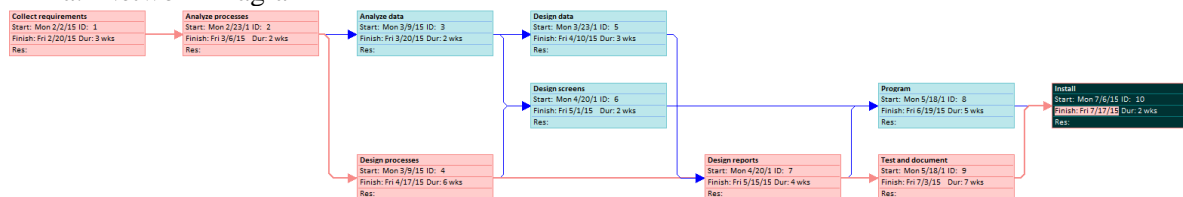
7. A variety of software products can be used to produce a Network diagram. The important issue is that students accurately express the relationships among the activities in this problem.

The following table summarizes the early finish, late finish, and slack times for this exercise. This table also identifies the activities located on the critical path.

**Problems and Exercises 7 Activity Summary Table**

Activity	Time	Immediate Predecessors	Early Finish	Late Finish	Slack	Critical Path?
1	3	--	3	3	0	Yes
2	2	1	5	5	0	Yes
3	2	2	7	8	1	No
4	6	2	11	11	0	Yes
5	3	3	10	11	1	No
6	2	3, 4	13	17	4	No
7	4	4, 5	15	15	0	Yes
8	5	6, 7	20	22	2	No
9	7	7	22	22	0	Yes
10	2	8, 9	24	24	0	Yes

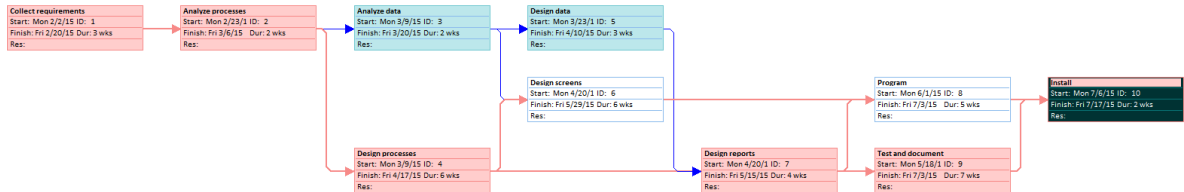
**a. Network Diagram**



b. The earliest expected completion time is 24 weeks.

c. The activities in the boxes with the darker border are on the critical path. These activities include collect requirements, analyze processes, design processes, design reports, test and document, and install.

d. Changing Activity 6 from 2 week to 6 weeks will create two critical paths. Since Activity 6 was not on the critical path originally, this change does not affect the project's completion time.



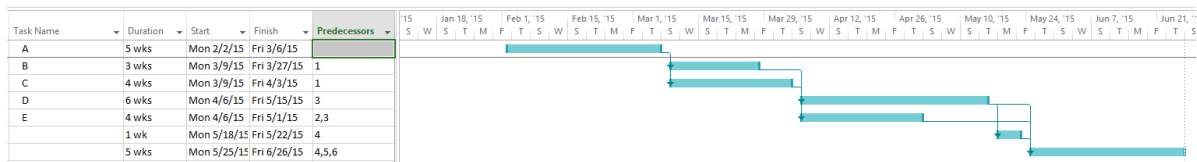
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12. The following table summarizes the early finish, late finish, and slack times for this exercise. This table also identifies the activities located on the critical path. A Gantt chart is also provided. The Gantt chart was prepared with Microsoft Project; the starting date is July 26, 2004.

**Problems and Exercises 12 Activity Summary Table**

Activity	Time	Immediate Predecessors	EF	LF	Slack	Critical Path?
A	5	--	5	5	0	Yes
B	3	A	8	12	4	No
C	4	A	9	9	0	Yes
D	6	C	15	15	0	Yes
E	4	B, C	13	16	3	No
F	1	D	16	16	0	Yes
G	5	D, E, F	21	21	0	Yes

**Problems and Exercises 12 Gantt Chart**



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