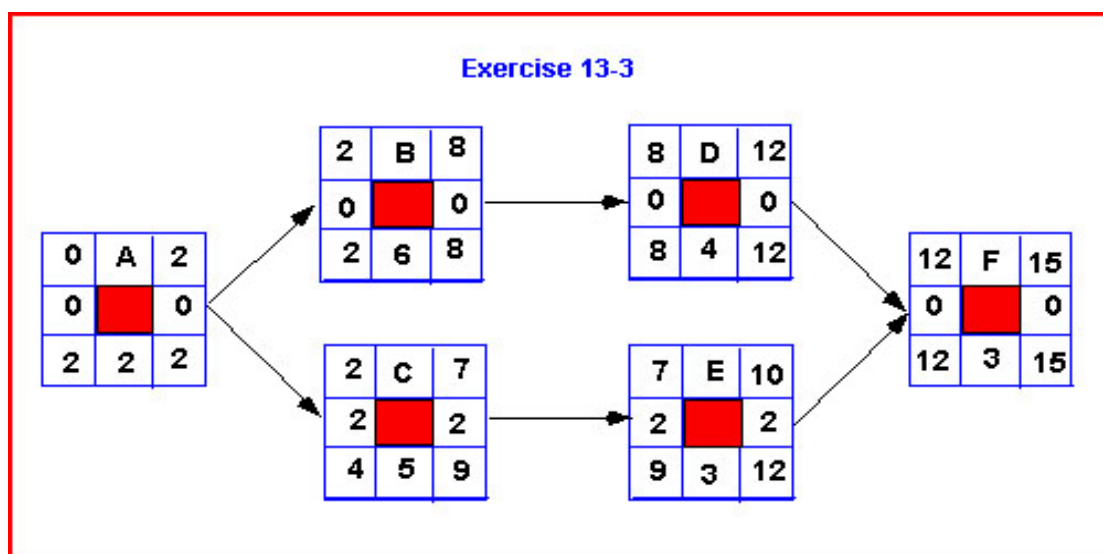


3. Given the project network and baseline information below, complete the form to develop a status report for the project at the end of period 4 and the end of period 8. From the data you have collected and computed for periods 4 and 8, what information are you prepared to tell the customer about the status of the project at the end of period 8?

The project appears to be doing nicely. In both periods 4 and 8 the cost variance is positive—+\$300 and +\$400, respectively. This suggests a pattern of good cost variance that is under budget.

The schedule variance is also positive—+\$300 and +\$400 for period 4 and period 8. Since Task D is already 25 per cent complete, Task B must have been completed at least one period early.



Exercise 13-3b						Project Baseline (PV)																
Task	Dur.	ES	LF	SL	Budget (PV)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
A	2	0	2	0	400	200	200															
B	6	2	8	0	2400				200	600	200	600	200	600								
C	5	2	9	2	1500				200	400	500	100	300									
D	4	8	12	0	1600										400	400	400	400				
E	3	7	12	2	900									300	400	200						
F	3	12	15	0	600														200	100	300	
Period PV Total						200	200	400	1000	700	700	500	900	800	600	400	400	200	100	300		
Cumulative PV Total						200	400	800	1800	2500	3200	3700	4600	5400	6000	6400	6800	7000	7100	7400		

End of period 4

Task	Actual % complete	EV \$	AC \$	PV \$	CV \$	SV \$
A	Finished	400	300	400	+100	0
B	50%	1200	1000	800	+200	+400
C	33%	500	500	600	0	-100
D	0%	0	0	0	0	0
E	0%	0	0	0	0	0
Cumulative totals		\$2100	\$1800	\$1800	\$+300	\$+300

End of period 8

Task	Actual % complete	EV \$	AC \$	PV \$	CV \$	SV \$
A	Finished	400	300	400	+100	0
B	Finished	2400	2200	2400	+200	0
C	Finished	1500	1500	1500	0	0
D	25%	400	300	0	+100	+400
E	33%	300	300	300	0	0
F	0%	0	0	0	0	0
Cumulative totals		\$5000	\$4600	\$4600	\$+400	\$+400

Note: Completion of the answer sheet requires constant reference to the baseline figure.

5. Given the following project network, baseline and status information, develop status reports for periods 1–4 and complete the project summary graph (or a similar one). Report the final SV, CV, CPI and PCIB. Based on your data, what is your assessment of the current status of the project? At completion?

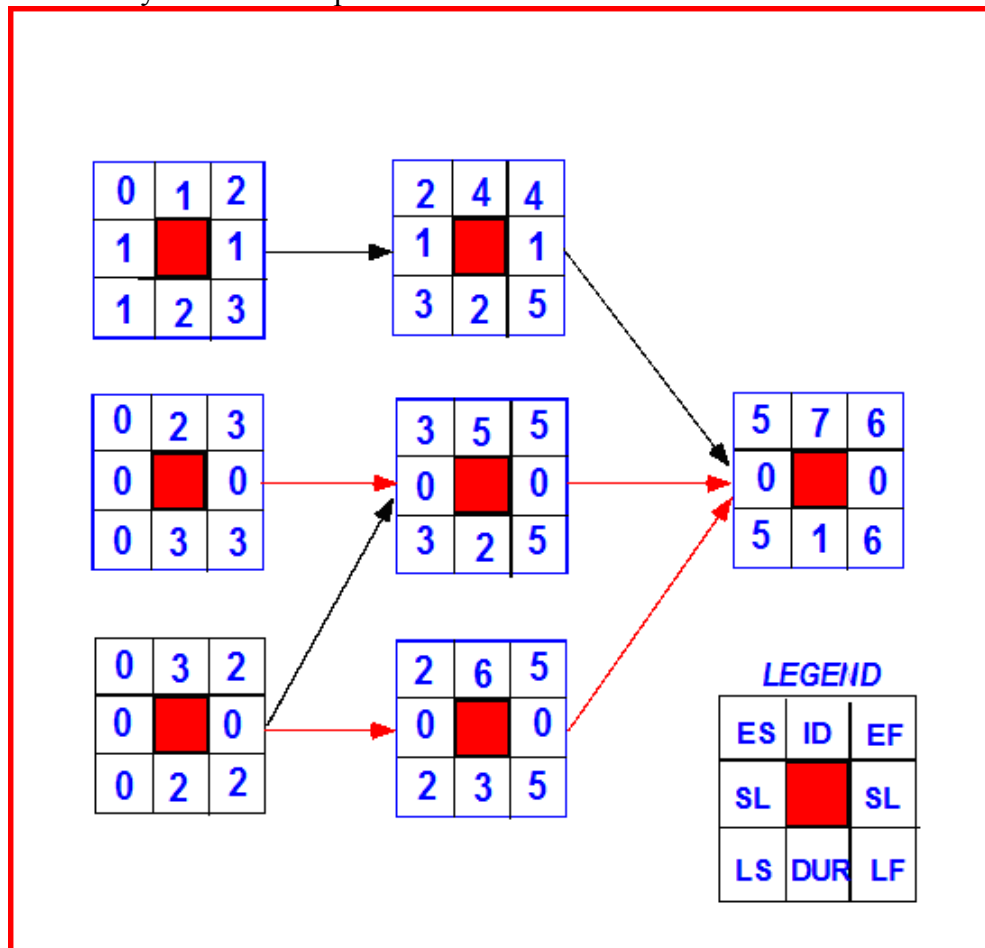
$$PCIAB = EV / BAC = 50/65 = 0.768$$

$$CPI = EV/AC = 50/60 = 0.833$$

$$CV = -\$10,000$$

$$SV = -\$3000$$

After four time periods the project is roughly 77 per cent (PCIB) complete and is currently getting only 83 cents worth of work for each dollar spent. The project is currently \$10 000 over budget. There is \$3000 worth of work on critical Activity 5 that has not been completed as planned so the project is behind schedule. Since so much of the project has been completed the project is expected to come in over budget. The forecast cost at completion is \$78 000 which is \$13 000 over budget. Whether the project will be completed on schedule will depend upon whether Activity 5 can make up for lost time.



SCHEDULE INFORMATION						BASELINE BUDGET NEEDS (\$ 000)						
ACT/ WP	DUR	ES	LF	SL	TOTAL PV	TIME PERIOD						
						0	1	2	3	4	5	6
1	2	0	3	1	12	4	8					
2	3	0	3	0	15	3	7	5				
3	2	0	2	0	8	4	4					
4	2	2	5	1	6			3	3			
5	2	3	5	0	10				6	4		
6	3	2	5	0	9			3	3	3		
7	1	5	6	0	5							5
TOTAL PV BY PERIOD						11	19	11	12	7	5	
CUMULATIVE PV BY PERIOD						11	30	41	53	60	65	

Status report: Ending period 1 (\$000)

Task	% complete	EV	AC	PV	CV	SV
1	50%	6	6	4	0	+2
2	40%	6	8	3	-2	+3
3	25%	2	3	4	-1	-2
Cumulative totals		14	17	11	-3	+3

Status report: Ending period 2 (\$000)

Task	% complete	EV	AC	PV	CV	SV
1	Finished	12	13	12	-1	0
2	80%	12	14	10	-2	+2
3	75%	6	8	8	-2	-2
Cumulative totals		30	35	30	-5	0

Status report: Ending period 3 (\$000)

Task	% complete	EV	AC	PV	CV	SV
1	Finished	12	13	12	-1	0
2	80%	12	15	15	-3	-3
3	Finished	8	10	8	-2	0
4	50%	3	4	3	-1	0
5	0%	0	0	0	0	0
6	33.3%	3	4	3	-1	0
Cumulative totals		38	46	41	-8	-3

Status report: Ending period 4 (\$000)

Task	% complete	EV	AC	PV	CV	SV
1	Finished	12	13	12	-1	0
2	Finished	15	18	15	-3	0
3	Finished	8	10	8	-2	0
4	Finished	6	8	6	-2	0
5	30%	3	3	6	0	-3
6	66.7%	6	8	6	-2	0
7	0%	0	0	0	0	0
Cumulative totals		50	60	53	-10	-3

$$PCIAB = EV / BAC = 50/65 = 0.768$$

$$CPI = EV/AC = 50/60 = 0.833$$

$$CV = -\$10,000$$

$$SV = -\$3000$$

$$ETC = (BAC - EV) / CPI = (65 - 50) / 0.833 = 18000$$

$$EAC = ETC + AC = 18000 + 60000 = \$78000$$

After four time periods the project is roughly 77 per cent (PCIB) complete and is currently getting only 83 cents worth of work for each dollar spent. The project is currently \$10 000 over budget. There is \$3000 worth of work on critical Activity 5 that has not been completed as planned so the project is behind schedule. Since so much of the project has been completed the project is expected to come in over budget. The forecast cost at completion is \$78 000 which is \$13 000 over budget.

Whether the project will be completed on schedule will depend upon whether Activity 5 can make up for lost time.

