5. Complete the following "Project Status Report" at the end of Week 11 based on Time-Phased budget above.

Activity	% Complete	EV	AC	PV	CV	SV
a	100%		10			
b	100%		30			
c	100%		80			
d	100%		140			
e	80%		100			
f	30%		90			
g	60%		30			
h	0%		0			
i	0%		0			
Cumulative Totals			480			

					Time-Phased Budget Baseline PV (week ending #)																
Activity	**te**	**% Complete**	**AC**	**PV ($,000)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
a	3	100%	10	12	4	4	4															
b	6	100%	30	40	10	10	5	5	5	5												
c	8	100%	80	60	5	5	10	15	10	5	5	5										
d	7	100%	140	100				5	10	15	20	20	20	10								
e	5	80%	100	70							20	20	10	10	10							
f	10	30%	90	230									10	20	25	25	25	25	40	30	20	10
g	4	60%	30	40									10	10	10	10						
h	5	0%	0	55																		
i	6	0%	0	30													5	5	5	5	5	5
					19	19	19	25	25	25	45	45	50	50	45	35	30	30	45	35	25	15
Cumulative PV Total					19	38	57	82	107	132	177	222	272	322	367	402	432	462	507	542	567	582

b.) and give answers starting with the following statements:

We should have done $ _____worth of work.
We have actually completed $_____ worth of work
We have actually spent $_____
Our project budget is $_____.
We are $? over budget.
We are only getting _____ cents out of every dollar we put into the project.
We are behind/ahead schedule.
We are only progressing at % of the rate planned.

Note: *To complete the answers you must calculate more then variances and indexes then what was asked for the Week 11.*

Question 5 contains two parts

According to the text book chapter 13 from p.459 we could find all the vocabularies which related to part 1, I would explain them briefly:
EV is short for earned value, which indicates the percent of the original budget that has been earned by actual work completed.
PV is short for planned time-phased of value.
Further, according to formulas: CV = EV - AC and SV = EV- PV.

he table below shows full solution:

Activity	% Complete	EV	AC	PV	CV	SV
a	100%	12	10	12	2	0
b	100%	40	30	40	10	0
c	100%	60	80	60	-20	0
d	100%	100	140	100	-40	0
e	80%	56	100	70	-44	-14
f	30%	69	90	55	-21	14
g	60%	24	30	30	-6	-6
h	0%	0	0	0	0	0
i	0%	0	0	0	0	0
Cumulative Totals		361	480	367	-119	-6

Example for activity “e”

PV(e) = 20 + 20 + 10 + 10 + 10 = 70
EV(e) = max(PV(e)) * Complete(e) = (20 + 20 + 10 + 10 + 10) * 80 % = 56
CV(e) = EV(e) - AC(e) = 56 - 100 = -44
SV(f) = EV(e) - PV(e) = 56 - 70 = - 14

Q5b.)

It is important that we acquire the BAC, EV, AC and PV values then according to the formulas CPI = EV / AC, SPI = EV / PV and PCIB = EV / BAC we could access to the questions.

Required data: BAC = 637, EV = 361, AC = 480, PV = 367

Calculations:

CPI = 361 / 480 = 0.75,
SPI = EV / PV = 361 / 367 = 0.98 ,
CIB = EV / BAC = 361 / 637 = 0.566719

After the basic data by week 11, we may calculate the value of EAC for the complete project life cycle.
EAC = ETC + AC = (BAC - EV) / (EV / AC) + AC = (637 - 361) / (361 / 480) + 480 = 846.98

PCIC = AC / EAC = 480 / 846.98 = 0.566719
PCIB= EV / BAC = 361/637 = .566

After the calculation we may solve the problems as below:

We should have done $367 worth of work.
We have actually completed $361 worth of work.
We have actually spent $480.
Our project budget is $637.
We are $119 over budget.
We are only getting 75.2 cents out of every dollar we put into the project.
We are slightly behind schedule.
We are progressing at 56% of the rate planned.

The answer there can be only PCIB or PCIC. Many will argue there should be SPI, which is incorrect. Percent progress is given in comparison to complete BAC, while SPI is the value of work accomplished for every dollar scheduled.
If we are confident with out BAC then we should always choose PCIB option as it contains EV and it does not include actual cost. However, if we are not confident, and if we had made changes in project or had not spend enough time in planning stage then revised estimate is a better option or PCIC.

However, this query was clearly referring to " planned". Only BAC is a planned value at project completion. EAC is not a planned value, it is revised budget that includes actually spending and progress, hence the question is not targeting PCIC.