Cost Exercise #2 (answers to 2 decimal places)

- You're a project manager for a underground fiber optics service. The teams you manage are responsible for ground preparation, laying, sealing the pipe (conduit), covering and finishing the ground work.

- The underground pipe is all the same size, the area they prepare and lay the pipe is level and your teams only lay pipe in a straight line.

- It's targeted (estimated) that your teams can complete (prepare, lay pipe and finish the ground work) 3 miles of pipe per day and is budgeted for $1,800 per mile (note: each 3 mile section is planned to be completed before the next section is started).

- This job is 12 miles long and the checkpoint is the end of day three.

- Using the project status form on the next slide, calculate key components of Earned Value (EV), PV, EV, AC, BAC, CV, CPI, SV, SPI, EAC & VAC (remember this is as of the end of day three).

- Interpretation is important so include your interpretation for each answer. ***Calculate appropriate answers to 2 decimal places!***

Cost Exercise Progress Report

Key: S=Actual Start, F=Actual Finish, PS=Planned Start, PF=Planned Finish

Activity	Day 1	Day 2	Day 3	Day 4	Status at end of Day 3
Section 1	S-------F				Complete - spent $5400
Section 2		S---F--PF Started section 3			Started on time and completed 33% of section 3 - spent $7585
Section 3			PS---F-PF Started section 4		Started early and completed 33% of section 4 - spent $6525
Section 4				PS---PF	33% complete but not scheduled to start

Cost Exercise (checkpoint at the end of day three) calculate to two decimal places when appropriate on answers which are not whole numbers and for ratios.

Cost Exercise Form - Calculate to 2 decimal Checkpoint at the end of day three

What Is:	Calculation	Answer	Interpretation of the Answer
PV	3 x 5400	$16200.00	At the end of day 3, the checkpoint day, we should have spent $16200.00. That is $5400 per side and $1800 per mile.
EV	3.33 x 5400	$17,982.00	We are at the end of the third day and are ahead into the fourth days work by 33%, so we should have spent $17,982.
AC	$19510.00	$19510.00	At the end of the third day, we have actually spent.
BAC	4 x 5400	$21600.00	At the end of the project, we are projected to have spent $21600.00
CV	$17,982.00 – $19510.00	-$1528.00	At the end of the third day, we are $1528.00 over budget.
CPI	$17,982.00/$19510.00	0.92 92%	For each $1.00 we are spending, we are getting $.92 of value.
SV	$17,982.00-$16200.00	$1782.00	Project is ahead of schedule based on projected costs.
SPI	$17,982.00/$16200.00	1.11 111%	Progressing at a rate of 111%
EAC	$21600.00/0.92	$23,478.26	Estimated completion of budget at $23,478.26. Higher than project budget of $21600.00
ETC	$23,478.26-$19510.00	$3,968.26	To complete the project from the third day on, we have $3,968.26.
TCPI	$21600.00-$17,982.00 / $21600.00- $19510.00	1.73 173%	173% cost performance to achieve remaining work, which is over 100%.
VAC	$21600.00-$23,478.26	-$1878.26	We will be $1878.26 over budget at completion of the project.