**EVM task**

1)after 7 months we can calculate cost variance

CV=EV-AC = (600+1200+(50%\*400)+400)-(600+1400+200+500)= -300 so the project is over budget by $300K

2)by 7 months the tasks 1,2,3 should be done completely +66% of task 4 but task 3 still need 1 month and task 4 is late by 1 month but they are running in parallel so the project is 1 month behind schedule

3) by the end of the project and assuming that task 3&4 would run by the same behavior and task 5 would run as planned task 4 would cost 1500(3\*500) so that would be over budget by $300K and task 2 was over budget by $200K so the total over budget for the project would be $500K

EV =%of actual work done \*planned budget = 600+1200+400\*0.5+1200\*0.33 =2400

AC= 600+1400+200+500 = 2700

CV = EV-AC = 2400-2700 = -300

Total planned project duration = 11 days tasks(1,2,4,5)

BAC = 3700

PV = %of planned work \* planned budget = 7/11 \* 3700 = 2350

SV =EV-PV =2400-2350 = 100

SPI = EV /PV = 2400/2350 = 1.02

CPI = EV/AC =2400/2700 = 0.88

EAC = BAC / CPI = 3700/0.88 = 4200