

## 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

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

$AC = 600 + 1400 + 200 + 500 = 2700$

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

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

$BAC = 3700$

$PV = \% \text{ of planned work} * \text{planned budget} = 7/11 * 3700 = 2350$

$SV = EV - PV = 2400 - 2350 = 100$

$SPI = EV / PV = 2400 / 2350 = 1.02$

$CPI = EV / AC = 2400 / 2700 = 0.88$

$EAC = BAC / CPI = 3700 / 0.88 = 4200$