**EVM**

## Cost Variance:

**CV = EV-PV**  
EV = Earned Value  
PV = Planned Value

< 0 Over budget  
= 0 On budget  
> 0 Within budget

Task 1: EV=600 PV=600 Task 2: EV=1200 PV=1400

Task 3 at 50%: EV=200 PV=200 Task 4 at 33.3%: EV=400 PV=500

Total: EV=2400 AV=2700 CV = 2400-2700=-300

## Schedule Variance:

**SV = EV-PV**  
EV = Earned Value  
PV = Planned Value

< 0 Behind schedule = 0 On schedule > 0 Ahead of schedule

PV = 600+1200+400+1200=3400

SV = 2400-3400 = -800

**Cost Performance Index**

**CPI = EV/AC**  
EV = Earned Value  
AC = Actual Cost

< 1 Over budget = 1 On budget > 1 Under budget

CPI=2400/2700=0.8889

## Schedule Performance Index

**SPI = EV/PV**  
EV = Earned Value  
PV = Planned Value

< 1 behind schedule = 1 on schedule > 1 ahead of schedule

SPI = 2400/3400 = 0.705

## Estimate At Completion, if CPI remains the same

**EAC = BAC/CPI**  
BAC = Budget at completion  
CPI = Cost performance index

BAC= 600+1200+400+1200+300=3700

EAC = 3700/0.8889=4,162.5|

**Please specify if the given project is over or under budget:** Over Budget

**Please specify if the given project is ahead or behind schedule:** Behind Schedule

**Please specify if the given project is over or under budget at the end of the project:** Over Cost