**Given the following information for a one-year project, answer the following questions.**

* **Planned Value (PV) = $30,000**
* **Earned Value (EV) = $27,000**
* **Actual Cost (AC) = $25,000**
* **Budget at Completion (BAC) = $150,000**

1. **What is the cost variance, schedule variance, cost performance index, and schedule performance index for the project?**
2. **Is the project ahead of schedule or behind schedule?**
3. **Is the project under budget or over budget?**
4. **Use the cost performance index to calculate the estimate at completion (EAC) for this project.  Is the project performing better or worse than planned?**
5. **Use the schedule performance index to estimate how long it will take to finish this project.**

Cost Variance:

CV = EV – AC

$27,000 - $25,000 = $2,000

Schedule Variance:

SV = EV – PV  
$27,000 - $30,000 = -$3000

Cost Performance Index:

CPI = (EV / AC) \* 100  
($27,000/$25,000) \* 100 = 108%

Schedule Performance Index:

SPI = (EV / PV) \* 100  
($27,000 / $30,000) \* 100 = 90%

2) The project is currently behind schedule.

3) The project is currently under budget.

4)

EAC = BAC/CPI  
150,000/1.08 = $138,888.88

The project is performing better than planned.

5) Estimated Completion Time:

12 months / SPI = 13.3 months

The project is behind by about one and one third month.