**Questions for the Case: AIC Netbooks – Optimizing Product Assembly**

Q 1: Compare the planned operation time and the actual operation time to identify the operations with significant difference in the processing times (Assume that any operations with more than 20% increase is generally considered significant).

Q 2: Compute the annual throughput of the “planned” assembly line at the Kaizhi plant. Compute is the “theoretical” efficiency of the planned assembly line at the Kaizhi plant.

Q 3: Compute the annual throughput of the “actual” assembly line at the Kaizhi plant. How does this compare with the “actual” throughput of the assembly line at the Kaizhi plant?

Q 4: The plant manager would like to rearrange/redistribute the tasks of the assembly time to increase the “actual efficiency” of the assembly line (compared to Q 3). Present **a promising proposal** where you rearrange/redistribute the tasks of the assembly time in Exhibit 3 in order to decrease the cycle time and increase the “actual” efficiency of the assembly line. Do not alter the sequence of the operations (to rearrange/redistribute the tasks of the assembly time. Compute the increase in the annual output of the plant based on your proposals.

Q 5:Determine a cycle time that will result in the higher annual throughput. Compute the other KPIs for the proposed process.

**Summarize your results in the table below:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Planned**  **Process** | **Actual**  **Process**  **(Current)** | **Proposal 1** |
| Cycle Time (s) |  |  |  |
| Workers Needed (Direct) |  |  |  |
| Workers (Direct + Indirect) |  |  |  |
| Flow Time (s) |  |  |  |
| Bottleneck(s) |  |  |  |
| Throughput/shift/line |  |  |  |
| Throughput/shift |  |  |  |
| Throughput/day |  |  |  |
| Annual Throughput |  |  |  |
| Line Efficiency (w Direct Labor) |  |  |  |
| Line Efficiency (w Total Labor) |  |  |  |