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- 1. One course objective on the test was applying a Rankine cycle with superheating, re-heating, and regeneration to steam power plants. The problem in the state was about using Rankine cycles to steam power plants.
- 2. A mistake I made on the test was adding a mixing chamber to the cycle diagram. I made this mistake because I was trying to figure out why a way for the diagram to look to get state seven to the highest moment on the graph. The advice I would give myself would be to double-check if I think that is actually correct or better yet ask for help.
- 3. Purpose: 0.5/10

Drawings: 1/10 Sources: 1/10 Design considerations: 1/10 Procedure: 2/10 Calculations: 2/10 Summary: 0.5/10 Materials:0.5/10 Analysis:1/10 Question 1: Actual cycle diagram: 1/14 P-V and T-S diagrams: 2/14 State Calculations: 2/14 Double Interpolation for state 6: 0/14 Turbine work: 1/14 Mass flow rate: 1/14 Heat rate space heat pumps: 0/14 Utilization Factor:0.5/14 Final results:0/14 10+(80)*(7.5/14)=52.8

I do not think that I had many strengths during the test besides what equations I was supposed to be using. My weakness I need to not always second guess if I use the right equation or if I'm solving it the correct way.

4. I encountered a few issues while completing the test, except when I got stuck while solving a problem. In such cases, I would go back through the problem to identify where I made the mistake and then proceed. If I was still unable to solve it, I would refer to my notes to get an idea of how to approach the problem. To complete the test, I looked at similar problems in my notes and tried to modify them to solve the given problems. Before solving the calculations, I also considered the purpose and design considerations. I am satisfied with how I completed the test and would not change anything. I did learn that this test is a better way to use Rankine cycles and the states to find the Utilization factor. I do think that what I learn is important for my professional career because I need to use my knowledge down the line on a project that involves things I've learned. I have not been able to apply these concepts in other courses besides the thermodynamic law in thermodynamics. I spent around an hour or two on

the three days I did the test. It was organized based on other assignments that I had. Something different that I would have done was give myself more time to take my test instead of starting for the last three days before it was due.