Test 1 demonstrates my work towards Developing an understanding of how to apply the first law of thermodynamics to different thermal systems. In problem number 1, I needed to use the 1st law to find the volume in different stages multiple times.

On problem number 1, I set up my p-v and t-s diagrams just like in the solution. I got the correct answer when solving for the thermal efficiency and the mass flow rate but not the effectiveness. When solving for effectiveness, I set up the equation wrong which led to me getting the wrong answer. Instead, next time I will make sure I'm setting up my equations correctly and doublecheck before turning my test in.

On problem number 2, my p-v diagram is set up right but my t-s diagram is a little off. When setting up my stages, my first problem was not using the tables to get the variables. This led to all of my variables through the rest of the problem being wrong. Instead, next time I will make sure to read the problem carefully to make sure to know when to use the tables.

I believe on this test I received a 74/100. The strengths of my test were purpose, drawings, and diagrams. Some of my weaknesses were data variables and procedures.

Something I did during this test that I believed helped me was starting and coming back to it every now and then so I could have a fresh mind when looking back at the questions. I think that learning how to draw and organize PV and TS diagrams is important and will help me in my professional career. If I go into the engineering field, these will be being used all the time. I haven't yet been able to apply these concepts to anything I've done at work. But I've had classes that relate to these concepts, like thermodynamics. I feel like I was most successful in drawing my diagrams and choosing the right equations for the right system. I spent at least 8 hours total solving the problems on this test spread out throughout the week.