1) The test focused on our ability to read cycles and put together states at specific points along a system based on given information. The first question was focused on the brayton cycle with a heat exchanger and regeneration and the unique stages that come with it. The second question was focused on the jet cycle which required us to have to use velocities along with volumes to decipher the question.

2) In the first question, my graphs look good, the only difference is I did not add a state 6, I was thinking about it when completing the test, but ultimately decided not to since there were only 5 numbers in the picture. My values are off, however my procedure is correct. In my solutions though one thing that doesn't make sense is the fact that my pump efficiency at 100% is lower than what i had solved it to be actually. In the second question my pv graph looks good but my ts is different from yours. My solutions differ from yours, My force is lower than yours by almost half and my velocity is nowhere near your answers. I think I messed up when converting units in this question.

If I had to take this test again, I think that I would have reached out to you for some advice when I was not too sure on interpretation. I Normally do well with spacing and making time for tests, I just need to speak up when I don't know what is going on.

PROBLEM 1)

1. P-v and T-s diagrams	1/9 out of 1/9	
2. State calculations (7 of them – including 5a)	2/9 out of 4/9	
For 6 -> Balance HX using 5a		
3. Efficiency and mass flow rate calculation	2/9 out of 2/9	
w_out4-5, w_in1-2 (use isent eff or 5a), qin3-4		
4. New HX effectiveness	1/9 out of 1/9	
5. Final results	0/9 out of 1/9	
TOTAL	6/9 out of 9/9	
PROBLEM 2)		
1. P-v and T-s diagrams	1/9 out o	f 1/9
2. State calculations (8 of them – including 3a an	d 5a) 2/9 out o	f 4/9
Use 500 kJ/kg -> Compressor & Turbine		
Cp and Cv are variable		
3. Pressure (P5)	1/9 out o	f 1/9
4. Velocity (V6) Use h5a	1/9 out o	f 1/9
5. Thrust	0/9 out o	f 1/9
6. Final results	0/9 out o	f 1/9
TOTAL	6/9 out c	of 9/9

FINAL GRADE :

 $10.0 + (80/2)^{*}(6/9+6/9) = 63.3$

4)

- A. I Struggled with the interpretation of the problem, and to solve this I just sat and looked at the problem along with my notes and the textbook to get a better understanding of what you really wanted us to solve. I understand that the "sitting and staring" approach doesn't work for most, but for me it gets my brain moving and the wheels turning until I can put some pieces together.
- B. I planned ahead of time, and gave myself plenty of time in order to complete it, because I know that although it was only two questions I knew that it was more than meets the eye.
- C. I learned how to read the index tables.
- D. I think these concepts are useful when working in various fields such as waste disposal.
- E. In my future as an engineer.
- F. Yes these are real world problems that may occur in my field
- G. I will use it at my future job, when asked to do a task that invokes these skills and knowledge that I've learned, and to the best of my ability.
- H. No not in the current courses that I am enrolled in.
- I. I was the most successful in the first question, I think that's where I spent most of my time.
- J. I see this course giving me valuable knowledge that my future employers will value that I know already.
- K. I spent 2 days on the test, about 10 hours. I spent the first day just looking and going over notes and the second day completing the problems and the third on the write ups and just making sure my answers are logical. I don't think I'd do anything differently other than get some more of my answers correct.