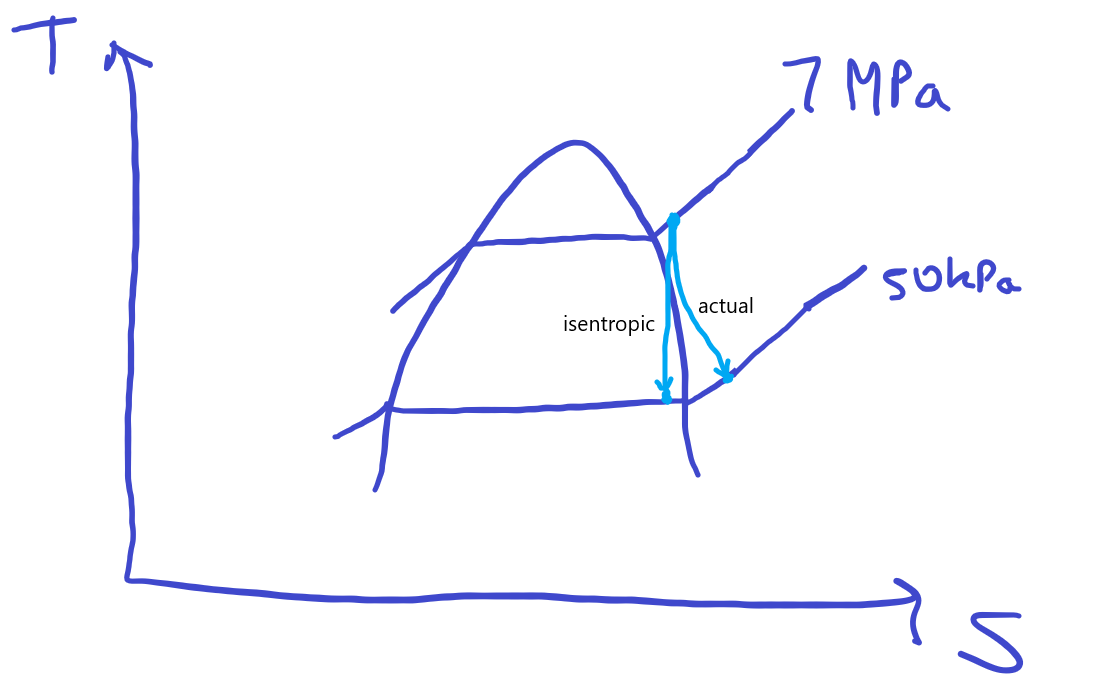
Max Shi  
E 234  
Professor De Rosa  
November 18, 2020  
I pledge my honor that I have abided by the Stevens Honor System.

Homework 8  
Partner: Ashley McDermott

1. Negative entropy generation is impossible, so this process is impossible.
2. This value is negative because heat is leaving the gas. In the system as a whole, the heat goes into the surroundings, which will have a positive entropy value. The system as a whole needs to have a positive entropy change, but not the gas itself.
3. 2. At 50 kPa, the sf < sin = 7.0910 < sg, so there would be a saturated mixture at the exit.  
      
4. 3. From the previous part, V2 is 545.29 m/s.