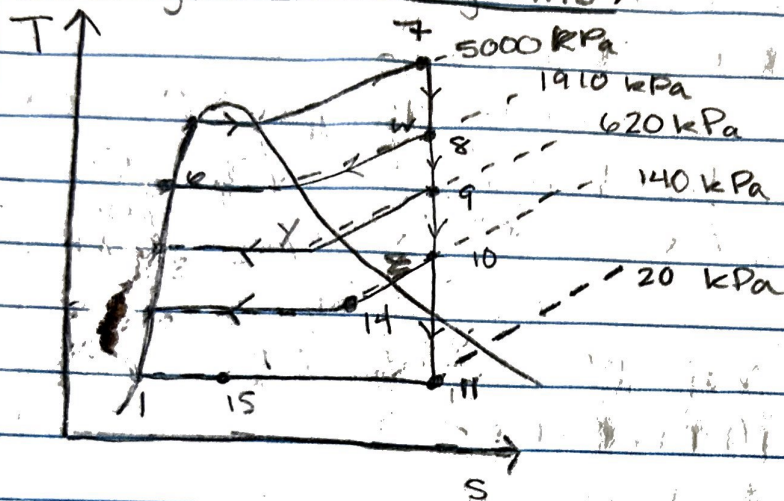


Thermal Applications Test 2

1. Purpose: To determine the fraction of extracted mass "y" and "z", the cooling water temperature, and the heat rejection rate from the condenser, as well as

Drawings and Diagrams:



Sources:

- 08 Regenerative Rankine Cycle
- Homework 12.2
- Saturated and superheated water tables

Design considerations

- Ideal system: kinetic and potential energy changes are negligible.
- State 3 is saturated liquid

Procedure:

First, I need to complete finding all values for the states from either the tables or through calculations. With the values completed, I will be able to set up the energy balance equations for the fraction of mass extracted. Following that, I can use more energy balance equations to find the temperature rise from the cooling water. Now these subsequent values are necessary to find the rate of heat rejected, the net