

1. Problem 4.11 – try solving the problem two different ways:
 - a.) using the availability and
 - b.) without using the availability.

2. Problem 14.12

3. a) For the plane with two tangent points in Fig. 5.2b, estimate the value of G , H , A , U , and S of each phase. Obviously, the grids are coarse, and difficult to read, so the key is to make all of the values of the thermodynamic properties consistent.

b) Explain the significance of a USV surface, like the one on Figure 5.1, but with a plane with 4 points of tangency.

4. Problem 5.26. For the properties of liquid water you should refer to the steam table data provided in: Keenan, Joseph H. et al. "Steam Tables: Thermodynamic Properties of Water Including Vapor, Liquid, and Solid Phases." Malabar, FL: Krieger Publishing Co., 1992.

Be sure to state and justify all assumptions made
