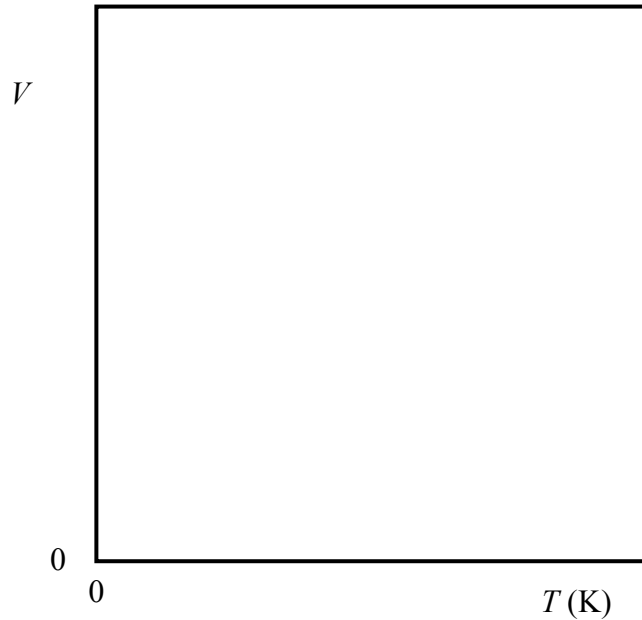
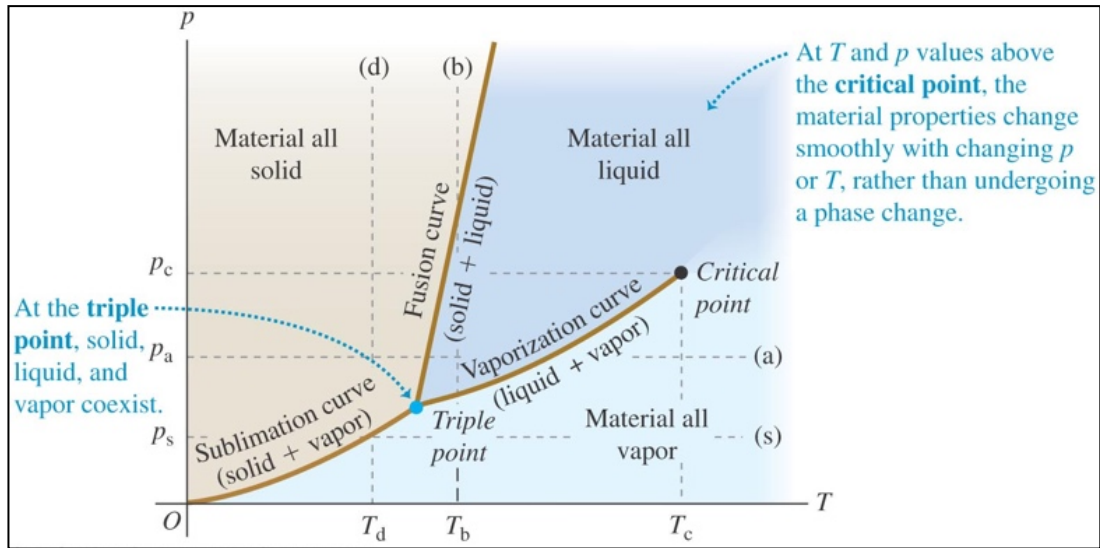

PHYS 1220 Group Work Sheet
Phases of matter

1. What would isobars (lines of constant pressure) look like on a V - T plot for an ideal gas?
 - a. Sketch volume vs. temperature curves for several different pressures. Indicate on the plot which isobars correspond to high pressures and which to low pressures.



- b. How would the V - T curves change as the amount of gas n increases?

2. Consider the generic P-T diagram below.



- Describe what happens to phases and volume raising the temperature from 0 at constant pressure below the triple point pressure.
- Describe what happens to phases and volume raising the temperature from 0 at constant pressure between the triple point pressure and the critical point pressure.
- What is the meaning of the positive slope of the fusion curve?
- What happens crossing the vaporization curve by raising the temperature at constant pressure?
- What happens crossing the vaporization curve by raising the pressure at constant temperature?