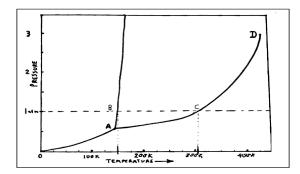
1. On the phase diagram below: A) Label areas of Gas, Liquid, Solid. B) Name Points A, B, C, D.



Find the follo	owing data:	
	Temp	Pressure
Triple pt.		
Melting pt		
Normal		
Boiling pt		
Critical pt.		

What changes in phase will occur if this substance is is slowly compressed at constant temp, from 0.01atm to 3.5atm at:

a. 100.K

b. 150.K

c. 300.K

d. 450.K

What are the necessary conditions for this material to sublime?

2. Construct the phase diagram for oxygen, O₂, on the axes below. It need NOT be to scale. LABEL: (s), (l), (g) areas; Lines of equilibrium between (s) & (g), (s) & (l), and (l) & (g): All given data points Show # & units of data points on axes.

DATA for O_2

Melting pt.	-218.4°C	
Critical pt.	-118.4°C @50.1atm	
Normal boiling pt	-182.96°C	
Triple pt.	54.34 K @0.0015 atm (1.1mmHg)	