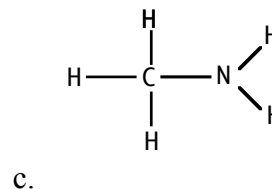
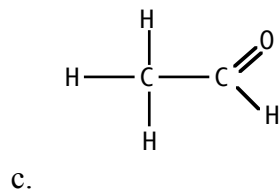
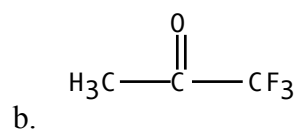
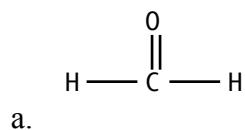


Chem 210-Jasperse Quiz Ch. 10
Due:

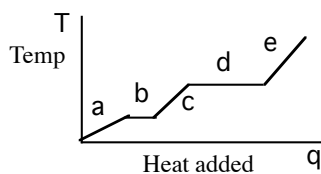
Name

- Which one of the following substances has London dispersion force as its only intermolecular force? (No hydrogen bonding, no dipole-dipole forces.)
 - CH_3OH
 - NH_3
 - H_2S
 - CH_4
- Which one of the following substances would have hydrogen bonding as one of its intermolecular forces?



- The substance with the largest heat of vaporization is:
 - I_2
 - Br_2
 - Cl_2
 - F_2
- The highest viscosity is observed for which of the following liquid/temperature combinations?
 - C_6H_{14} at 275 K
 - C_6H_{14} at 299 K
 - C_5H_{12} at 299 K
 - $\text{HOC}_4\text{H}_8\text{OH}$ at 299 K
 - $\text{HOC}_4\text{H}_8\text{OH}$ at 275 K

- Which part of the heating curve below corresponds to melting of the solid?



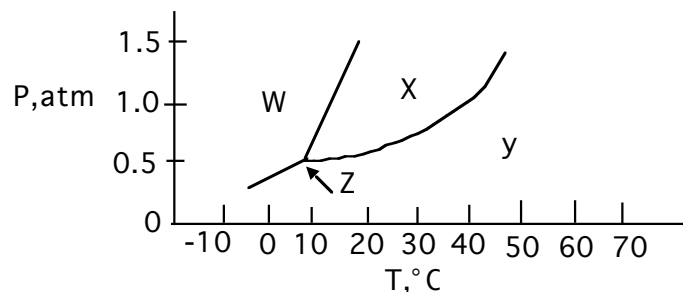
- a. a b. b c. c d. d e. e

Note: There is a back side, too!

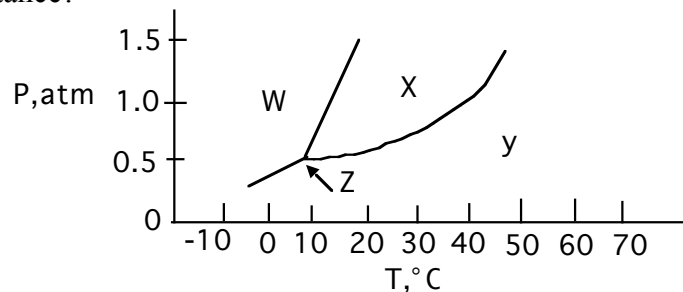
6. Which statement is true for the following structures:



- CH₃OH, CH₃CH₂OCH₂CH₃, and CH₃CH₂CH₂OH **all** have hydrogen bonding
 - CH₃CH₂OCH₂CH₃ would evaporate faster than CH₃CH₂CH₂CH₂OH
 - CH₃CH₂CH₂CH₂OH would evaporate faster than CH₃CH₂OH
 - NaF would evaporate fastest
7. In which phase does the substance whose phase diagram is shown below exist at room temperature and pressure?



- solid
 - liquid
 - gas
 - supercritical fluid
8. What is the normal boiling point of this substance?



- 3°C
 - 10°C
 - 25°C
 - 38°C
9. Which of the following ranking is **true**, when the following substances are melted:
- BaBr₂ CaO BaF₂ CH₃CH₂CH₂OH
- Melting point: CaO > BaBr₂ > BaF₂ > CH₃CH₂CH₂OH
 - Melting point: CH₃CH₂CH₂OH > BaBr₂ > CaO > BaF₂
 - Melting point: CaO > BaF₂ > BaBr₂ > CH₃CH₂CH₂OH

10. Which one of the following substances would have the highest boiling point?

- CH₃OH
- CO₂
- CH₄
- Kr