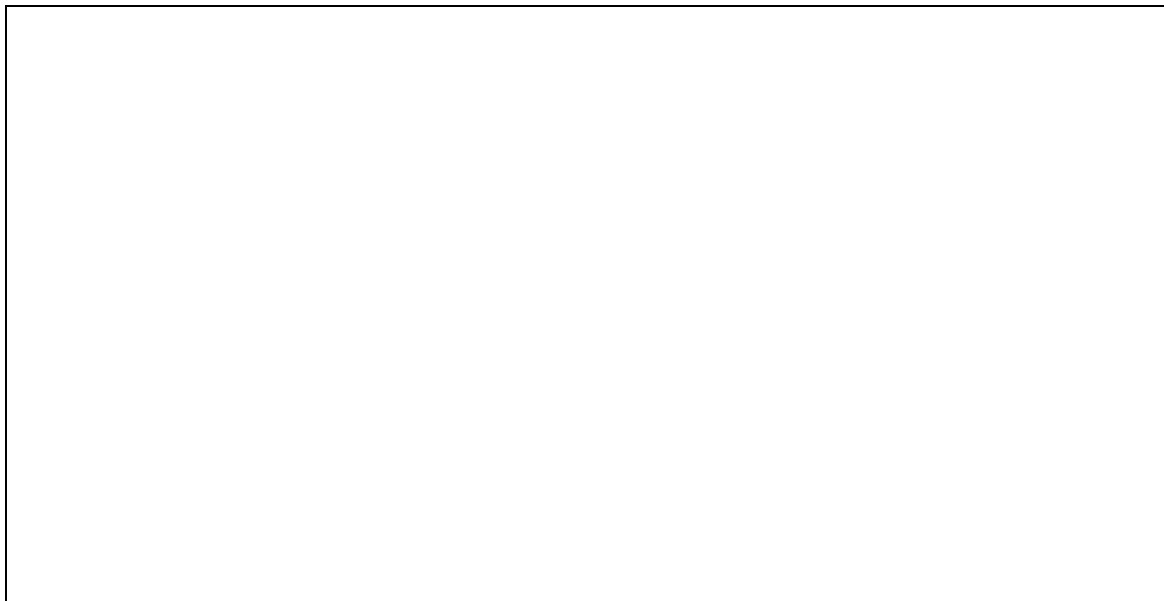


Marks
7

- A phase diagram of a pure compound has a triple point at 13 °C and 205 mmHg, a normal melting point at 17 °C, and a normal boiling point at 87 °C. Draw a phase diagram for this compound. Label all the different regions of the phase diagram.



Indicate whether each of the following statements regarding this compound is true or false.

The density of the solid is greater than that of the liquid.

True / False

If the pressure is reduced from 835 mmHg to 85 mmHg at a constant temperature of 11 °C, sublimation occurs.

True / False

At a constant pressure of 835 mmHg, evaporation occurs if the temperature is raised from 13 °C to 81 °C.

True / False

THE REMAINDER OF THIS PAGE IS FOR ROUGH WORKING ONLY.