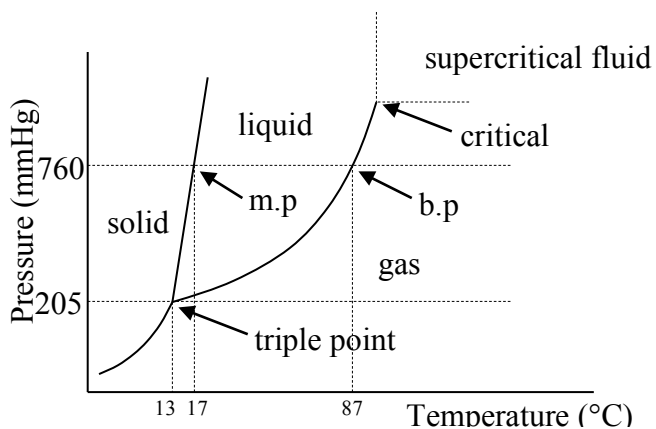


- A phase diagram of a pure compound has a triple point at 13 °C and 205 mmHg, a normal melting point at 17 °C, and a normal boiling point at 87 °C. Draw a phase diagram for this compound. Label all the different regions of the phase diagram.

**Marks**  
7



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.**