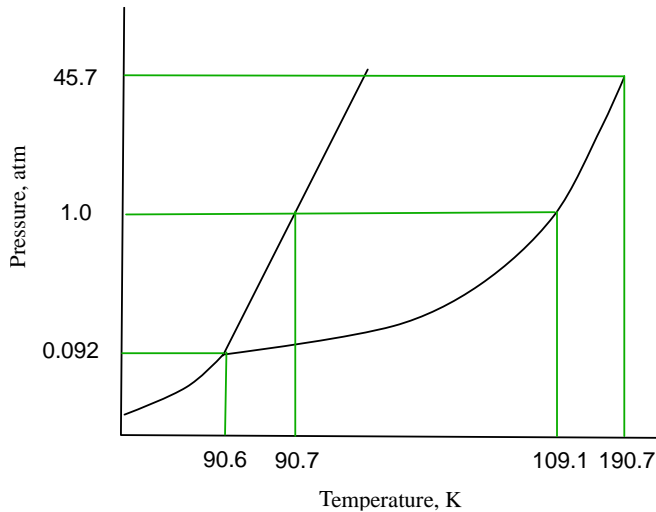


Phase Diagrams

Consider the phase diagram below to answer the questions. The green lines are there to help determine points of temperature and pressure.



- What is the normal boiling point of methane? What is its melting point at around 760 mmHg?
- Methane is a liquid, gas, or solid at 0.84 atm at 96 K.
- What is the triple point pressure and temperature?
- What is the critical temperature and pressure?
- At what temperature and pressure is methane a supercritical fluid?
- Is the melting point of methane at 1.0 atm above or below the triple point?
- At 0.092 atm, what are the phases of methane?