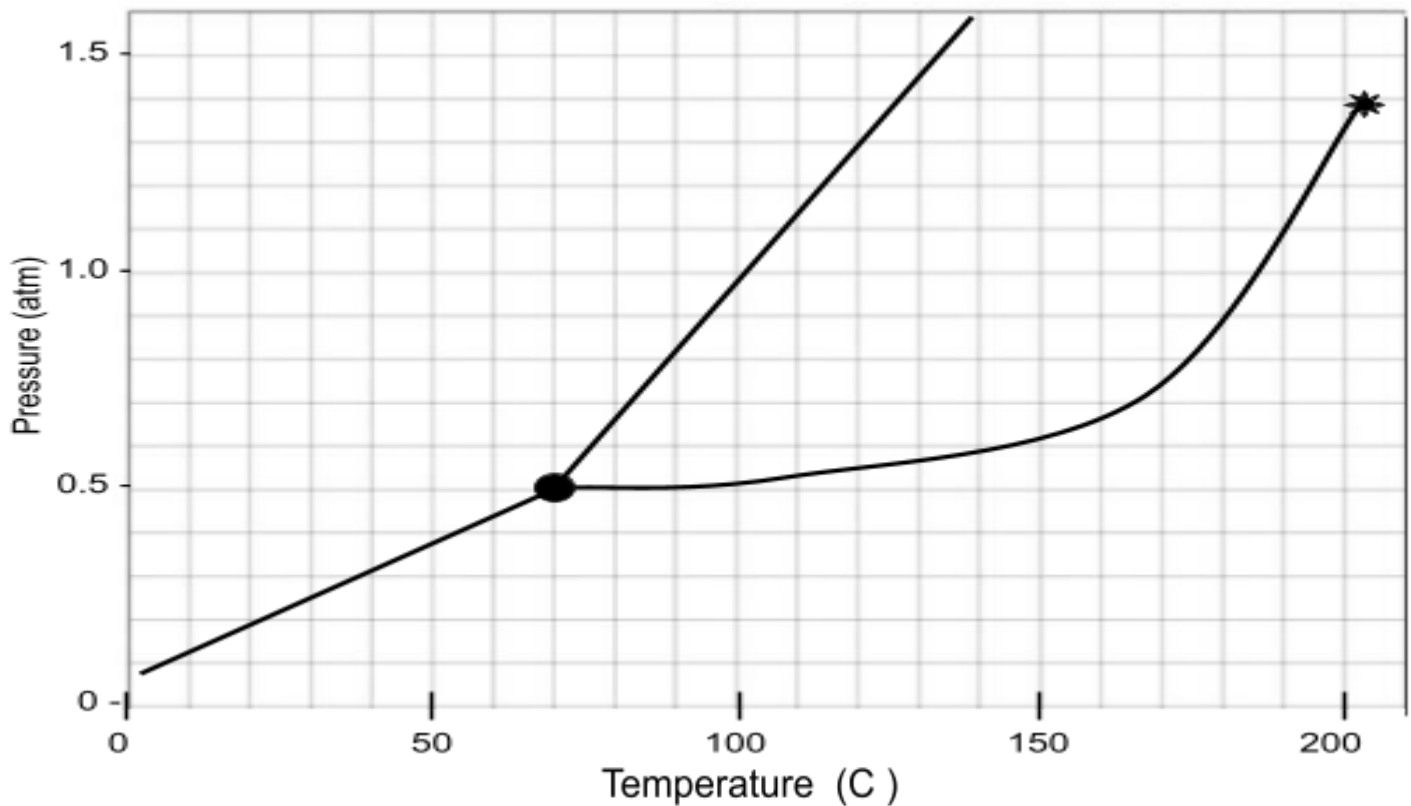


Phase Diagram for Material X



1. Determine the normal melting temperature in the unit degrees Celsius

2. Determine the normal boiling temperature in the unit degrees Celsius

3. Determine the triple point pressure in the unit atmosphere

4. Determine the triple point temperature in the unit degrees Celsius

5. Determine the critical temperature in the unit degrees Celsius

6. Determine the phase of the substance at 150 C and 1.1 atm

- If the temperature is decreased to 40 C; determine the resulting phase

- Identify this phase transition

7. Determine the phase of the substance at 110 C and 0.3 atm

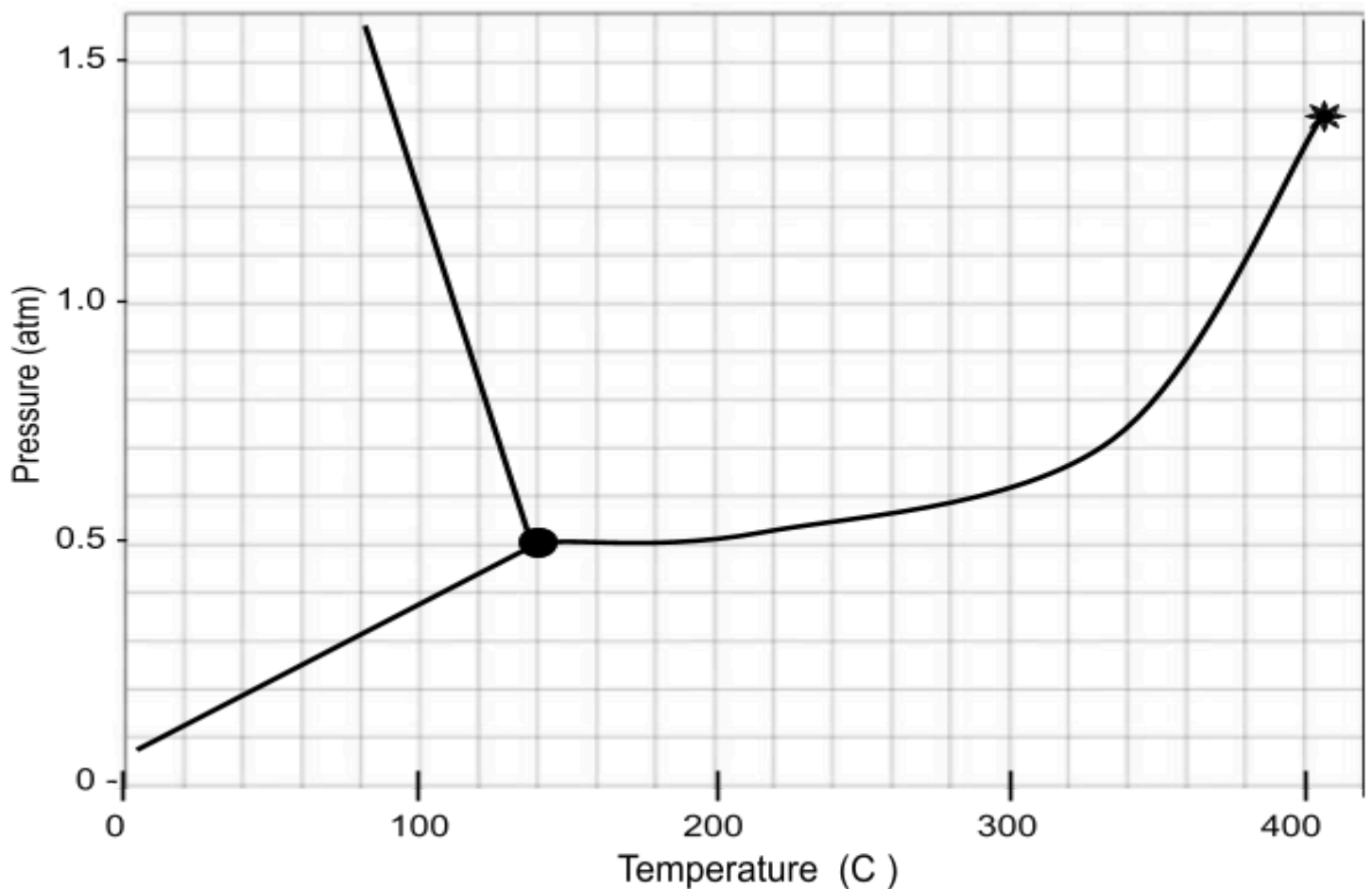
- If the temperature is decreased to 10 C; determine the resulting phase

- Identify this phase transition

8. Determine the phase of the substance at 150 C and 1.1 atm

- If the pressure is decreased to 0.3 atm; determine the resulting phase

- Identify this phase transition



9. Determine the normal melting temperature in the unit degrees Celsius

10. Determine the normal boiling temperature in the unit degrees Celsius

11. Determine the critical temperature in the unit degrees Celsius

12. Determine the phase of the substance at 100 C and 0.1 atm

- If the pressure is increased to 0.7 atm; determine the resulting phase

- Identify this phase transition

13. Determine the phase of the substance at 300 C and 0.7 atm

- If the temperature is increased to 400 C; determine the resulting phase

- Identify this phase transition

14. Determine the phase of the substance at 50 C and 1.1 atm

- If the temperature is increased to 200 C; determine the resulting phase

- Identify this phase transition
