

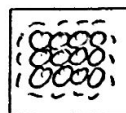
NAME:

PERIOD:

TIME/TEMPERATURE GRAPH OF 2 SUBSTANCES

Directions: Label the following on the time/temperature graph of two substances.

- A • In red highlight and label the endothermic line
- B • In blue highlight and label the exothermic line
- C • In green label the phase changes (vaporization, condensation, melting, freezing)
- D • Each time the line changes direction (10 spots) label the states of matter present
- E • On each line label a high density area and a low density area
- F • Draw a molecular representation at each phase change: Ex:



- G • Assign the appropriate terms to each state: **definite volume, indefinite volume, definite shape, and indefinite shape**

Solid: _____

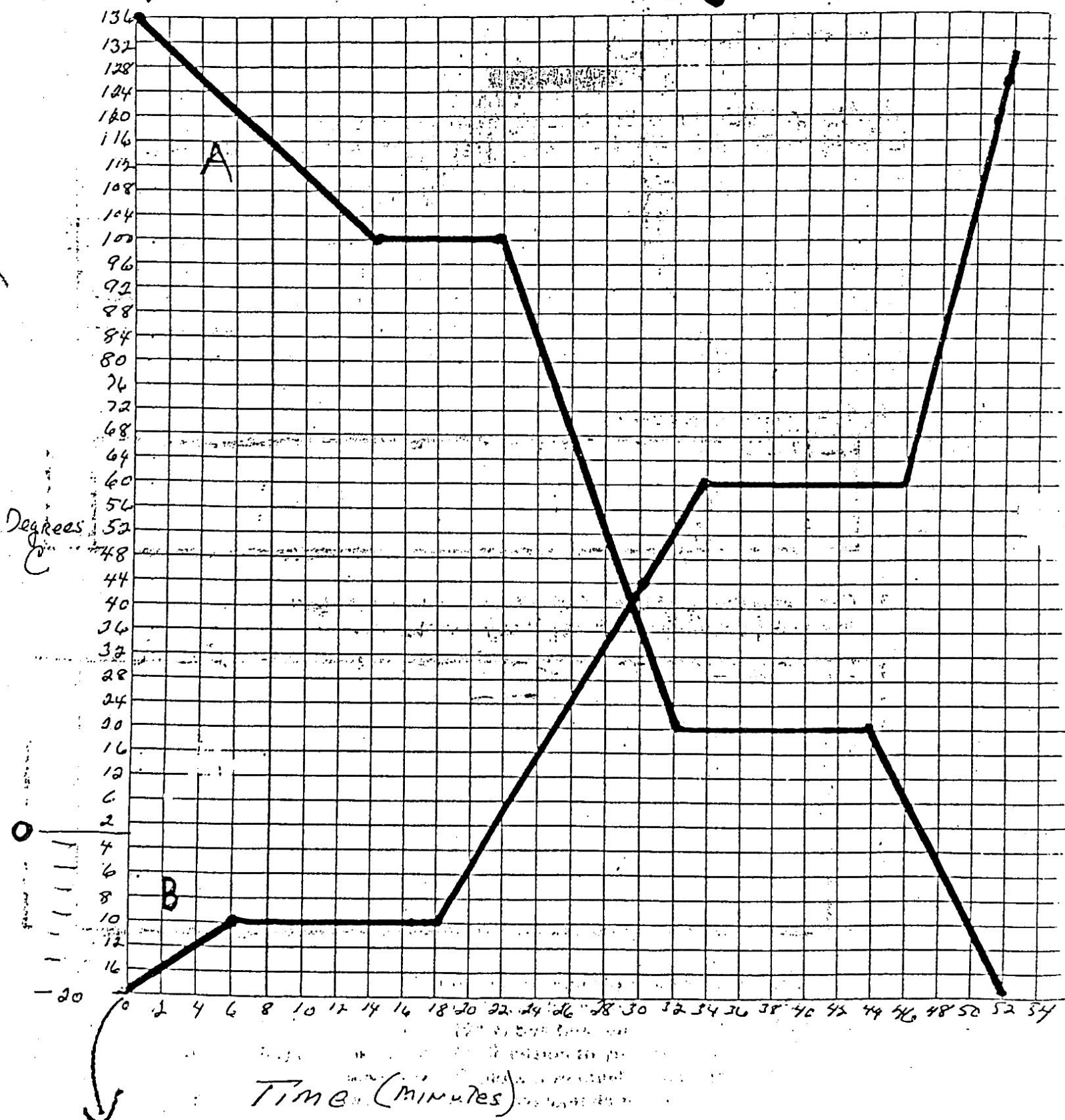
Liquid: _____

Gas: _____

Questions:

1. Do both lines represent the same substance? How do you know?
2. What is the melting point of substance B?
3. What is the freezing point of substance A?
4. What is the vaporization point of substance B?
5. What is the condensation point of substance A?
6. How would the graph change if you added more of each substance? Would the temperature of the plateaus change?
7. If we added salt to substance A, how would the freezing point change?
8. If we added salt to substance B, how would the boiling point change?

→ GAS F/M + Boiling GRAPH



Solid