1. Derive the exponential form of Clausius-Clapeyron to its logarithmic form

2. The vapor pressure of ethanol at 34.9°C is 100.0 torr. Calculate the vapor pressure of ethanol at 56.2°C with given Enthalpy of vaporization (ΔH) is 41.7 kJ/mol and universal gas constant is 8.314 J/mol K

3. This unknown compound has vapor pressure of 13.6 torr at 16.0°C and 26.7 torr at 27.0°C. With these given information, calculate the enthalpy of vaporization of this unknown compound.

4. At 30.0°C, water has vapor pressure of 31.8 torr. Given enthalpy of vaporization (ΔH) of water is 44.0kJ/mol. What is the vapor pressure at 28.0°C?

5. A compound has vapor pressure of 29.0 torr at 37.6°C and 15.0 torr at 29.9°C. Calculate the enthalpy of vaporization of this compound.

6. At 30.0°C, water has vapor pressure of 31.8 torr. Given enthalpy of vaporization (ΔH) of water is 44.0kJ/mol. What is the temperature when vapor pressure is 28.3 torr?