## Same as Question \#7 From Blue Modern Chem. Text Book


8. Refer to the phase diagram for water on page 381 to answer the following questions.
a. Describe all the phase changes a sample of solid water would undergo when heated to its critical temperature at a pressure of 1.00 atm .
b. Describe all the phase changes a sample of water vapor would undergo when cooled to $5^{\circ} \mathrm{C}$ at a pressure of 1.00 atm .
c. At approximately what pressure will water be a vapor at $0^{\circ} \mathrm{C}$ ?
d. Within what range of pressures will water be a liquid at temperatures above its normal boiling point?

## FIGURE 12-14 This phase

diagram shows the relationships between the physical states of water and its pressure and temperature.

