CH 13 Gases Review

1. What are some properties of a gas? How do the particles behave under increased/decreased temperature, pressures, volumes?
2. What are the units for pressure? How does each relate to 1 atm? (conversion factors)
3. What is the definition of Boyle's Law?
    a. What two properties does this law relate? What is true about the other 2 properties?
    b. How do they relate?
    c. What is the equation used to relate two of these situations?
    d. If a gas is compressed from 4.1 L to 1.4L and the temperature remains constant, what happens to the pressure?
    e. Pg. 419 # 18
4. What is the definition of Charles' Law?
    a. What two properties does this law relate? What is true about the other 2 properties?
    b. How do they relate?
    c. What is the equation used to relate two of these situations?
    d. Pg 419 # 32
5. What is the definition of Gay-Lussac's Law?
    a. What two properties does this law relate? What is true about the other 2 properties?
    b. How do they relate?
    c. What is the equation used to relate two of these situations?
    d. The gas in a closed container has a pressure of 3.00×10^2 kPa at 30°C. What will the pressure be if the temperature is lowered to -172°C? (convert to K first)
6. What is the definition Avagadro's Law?
    a. What two properties does this law relate? What is true about the other 2 properties?
    b. How do they relate?
    c. What is the equation used to relate two of these situations?
    d. Pg 420 #42, 44
7. What is the Ideal Gas Law equation?
    a. What is the volume occupied by 1.24 mol of a gas at 35°C if the pressure is 96.2 kPa?
    b. Pg 420 #49, 50