**KMT and Gas Laws Test Review: Topics**

1) What are the four postulates of the kinetic molecular theory?

2) Why can we assume that gases are in constant, random motion?

3) Why do gases mix so well with each other, while liquids frequently do not?

4) If I have 45 moles of a gas at a temperature of 320 K and a pressure of 1.25 atm, what is the volume of this gas? R = 0.08206 Latm/molK.

5) I have 45 liters of a gas at a temperature of 320 K. If I increase the temperature to 450 K, what will the new volume be?

6) What happens in the following scenarios?

* When you increase the pressure on a gas, the volume (increases/decreases).
* When you decrease the temperature of a gas, the pressure (increases/decreases).
* When you increase the volume of a gas, the pressure (increases/decreases).