Dougherty Valley HS Chemistry - AP Gas Laws – Combined Law

Name:

Worksheet #4

Period:

Seat#:

In practical terms, it is often difficult to hold any of the variables constant. When there is a change in pressure, volume and temperature, the combined gas law is used. We use the following formulas:

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}; \quad K = {}^{\circ}\text{C} + 273$$

Directions: Complete the following chart. Show your work.

	P ₁	V ₁	T ₁	P ₂	V ₂	T ₂
1)	1.50 atm	3.00 L	20.0°	2.50 atm		30.0°C
2)	720. torr	256. mL	25.0°C		250. mL	50.0°C
3)	600. mmHg	2.50 L	22.0°C	760. mmHg	1.80 L	
4)		750. mL	0.00°C	2.00 atm	500. mL	25.0°C
5)	95.0 kPa	4.00 L		101. kPa	6.00 L	198.°C