Chemistry II Worksheet

7.	The Celsius temperature of the a 3.00 L sample of gas is lowered from 80.0 $^{\circ}\text{C}$ to 30.0 $^{\circ}$ C. What will be the resulting volume of this gas?
8.	What is the volume of the air in a balloon that occupies 0.620 L at 25.0 $^{\circ}$ C if the temperature is lowered to 0.00 $^{\circ}$ C?
9.	A gas in a sealed container has a pressure of 125 kPa at a temperature of 30.0° C. If the pressure in the container is increased to 201 kPa, what is the new temperature?
10.	The pressure in an automobile tire is 1.88 atm at 25.0°C. What will be the pressure if the temperature warms up tp 37.0° C?
11.	Helium gas in a 2.00 L cylinder is under 1.12 atm of pressure. At 36.5°C, that same gas sample has a pressure of 2.56 atm. What was the initial temperature of the gas in the cylinder?
12.	If a gas sample has a pressure of 30.74 kPa at 0.00°C, by how much does the temperature have to decrease to lower the pressure to 28.4 kPa?
13.	A rigid plastic container holds 1.00 L of methane gas at 660 torr $$ pressure when the temperature is 22.0°C. How much $$ more pressure will the gas exert if the temperature is raised to 44.6°C?