Unit 9F Practice Problems III
Gas Laws

Name:

Date:

I. Questions:

1. What is standard temperature? _____°C or _____ K

2. What is standard pressure? _____ atm or _____ kPa or _____ mm Hg

3. What is another unit equivalent in meaning to mm Hg? _____

4. What variable is held constant in Charles's Law? _____

5. If A and B are inversely related and we double A, what happens to the value of B? _____

    _____

6. If 2 variables have a constant as their product, they are _____ related.

II. Problems: Show work and circle final answer.

7. A quantity of gas has a volume of 400.0 mL when confined under a pressure of 600.0 mm Hg. What will be the new volume of the gas if the pressure is reduced to 200.0 mm Hg at constant temperature?

8. Under a pressure of 1.0 atm, a confined gas has a volume of 750 mL. At constant temperature, the pressure is increased until the gas has a volume of 610 mL. What is the new pressure?

9. A quantity of gas has a volume of 200.0 mL at a temperature of -4.0 °C. If the temperature of the gas is raised to 26.0 °C at constant pressure, what volume will the gas occupy?