

Gas Laws – Charles' Law, Boyle's Law, Gay-Lussac's Law

*Present your final answer with units and sig figs

*For each question, choose the main gas law that applies

1. A container holds 50.0 mL of nitrogen at 25°C and a pressure of 736 mmHg. What will be its new volume if the temperature increases by 35°C and pressure is held constant?

Main gas law: Charles's Law Boyle's Law Gay-Lussac's Law

<u>Answer</u>	<u>Units</u>

2. A container holds 500. mL of CO₂ at 20.°C and 742 torr. What will be the volume of the CO₂ if the pressure is increased to 795 torr?

Main gas law: Charles's Law Boyle's Law Gay-Lussac's Law

<u>Answer</u>	<u>Units</u>

3. The pressure of a cylinder of gas when heated to a temperature of 250. K is 1.50 atm. What was the initial temperature of the gas if its initial pressure was 1.00 atm.

Main gas law: Charles's Law Boyles' Law Gay-Lussac's Law

<u>Answer</u>	<u>Units</u>