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Assignment: Ideal Gas Law

1. A sample of 4.25 moles of hydrogen at 20.0 °C occupies a volume of 25.0 L. What is the pressure of this sample?
2. A 70.0 L tank on a car is drained of liquid gasoline. How many moles of octane vapour are present in this tank at SATP?
3. What volume will 30.0 g of NO (g) occupy at 3.26 atm and 19.0 °C?
4. What mass of sulfur trioxide is present in a 4.8 L container at 55 °C and 150kPa?
5. Find the molar mass of an unknown gas if a 0.87g sample of the gas occupies a volume of 325mL at 21.5oC and 1.01atm.