

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) A sample of hydrogen gas exerts a pressure of 466 torr in a container. What is this pressure in atmospheres? (1 atm = 1.01325×10^5 Pa = 760 torr) 1) _____
- A) 0.613 atm
B) 0.217 atm
C) 1.63 atm
D) 4.60 atm
E) 0.466 atm
- 2) A sample of a gas has an initial pressure of 0.987 atm and a volume of 12.8 L. What is the final pressure if the volume is increased to 25.6 L? (You may assume temperature is held constant for the sample through the process.) 2) _____
- A) 1.97 atm
B) 323.4 atm
C) 2.03 atm
D) 0.003 atm
E) 0.494 atm
- 3) What are the conditions of STP? 3) _____
- A) 0°C and 760 atm
B) 273.15°C and 760 torr
C) 0°C and 1 torr
D) 0 K and 1 atm
E) 273.15 K and 760 torr
- 4) If 25.5 L of oxygen are cooled from 150°C to 50°C at constant pressure, what is the new volume of oxygen? (Assume pressure is held constant.) 4) _____
- A) 33.4 L B) 3.5 L C) 0.0514 L D) 0.03 L E) 19.5 L
- 5) What is the volume occupied by 25.2 g of CO₂ at 0.840 atm and 25°C? 5) _____
($R = 0.08206 \text{ L} \cdot \text{atm/K} \cdot \text{mol}$)
- A) 1.34 L B) 24.2 L C) 0.060 L D) 16.7 L E) 734 L

Answer Key

Testname: MINI-PRAC CH8

- 1) A
- 2) E
- 3) E
- 4) E
- 5) D