

R = 0.082 L Atm/K mol

Chemistry 1010

Quiz #7 A

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91. Code A

92. A tank had a total pressure of 6.2 atm and contained 2.0 atm of CO₂ gas, 3.4 atm of N₂ gas and an unknown quantity of O₂ gas. What is the partial pressure of the O₂ gas?
a) 11.6 atm b) 0.8 atm c) 5.4 atm d) not enough information given
93. What is the volume of 0.33 moles of Cl₂ gas at STP?
a) 7.4 L b) 67.9 L c) 1.98×10^{23} L d) 71 L e) 22.4 L
94. What is the mass of 12.0×10^{23} molecules of H₂ gas?
a) 8 grams b) 6 grams c) 4 grams d) 2 grams e) 1 gram
95. A gas occupies 6 liters at 27°C. What would the volume be at 127°C?
a) 6.5 L b) 4.5 L c) 8 L d) 7.2 L
96. A sample of gas at 77°C and 1.33 atm occupies a volume of 50.3 L. How many moles of the gas are present?
a) 28.7 b) 0.43 c) 2.33 d) 10.6 e) 3.1
97. The inside pressure of an automobile tire is 1.8 atm at a temperature of 20°C. What will the pressure in the tire be, if after 10 miles of driving the temperature of the tire increases to 46°C?
a) 2.2 atm b) 4.1 atm c) 0.8 atm d) 1.96 atm e) 1.65 atm
98. A resort in the Smokies has an atmospheric pressure of 610 mm Hg. What is that in atmospheres?
a) 1.00 b) 1.25 c) 0.80
99. A sample of N₂ gas occupied 5.0 L at 27°C and 10 atm pressure. What would be the new volume if the temperature was increased to 327°C and the pressure was decreased to 5 atm?
a) 5.0 L b) 7.5 L c) 2.5 L d) 10 L e) 20 L
100. A sample of gas having a mass of 8.0 grams under a pressure of 380 Torr and at 27°C temperature occupied 12.3 liters. What is the gas?
a) H₂ b) O₂ c) CO₂ d) N₂ e) Cl₂