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General Physics I, Quiz 6
PHYS10400, Class year100
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SN: _____, Name: _____

Chapter 18-20, Serway; ABSOLUTELY NO CHEATING!

Please write the answers on the blank space or on the back of this paper to save resources.

1. Gas is contained in an 8.00-L vessel at a temperature of 20.0°C and a pressure of 9.00 atm. (a) Determine the number of moles of gas in the vessel. (b) How many molecules are in the vessel?
2. A violin string has a length of 0.350 m and is tuned to concert G, with $f_G = 392$ Hz. (a) How far from the end of the string must the violinist place her finger to play concert A, with $f_A = 440$ Hz? (b) If this position is to remain correct to one-half the width of a finger (that is, to within 0.600 cm), what is the maximum allowable percentage change in the string tension?