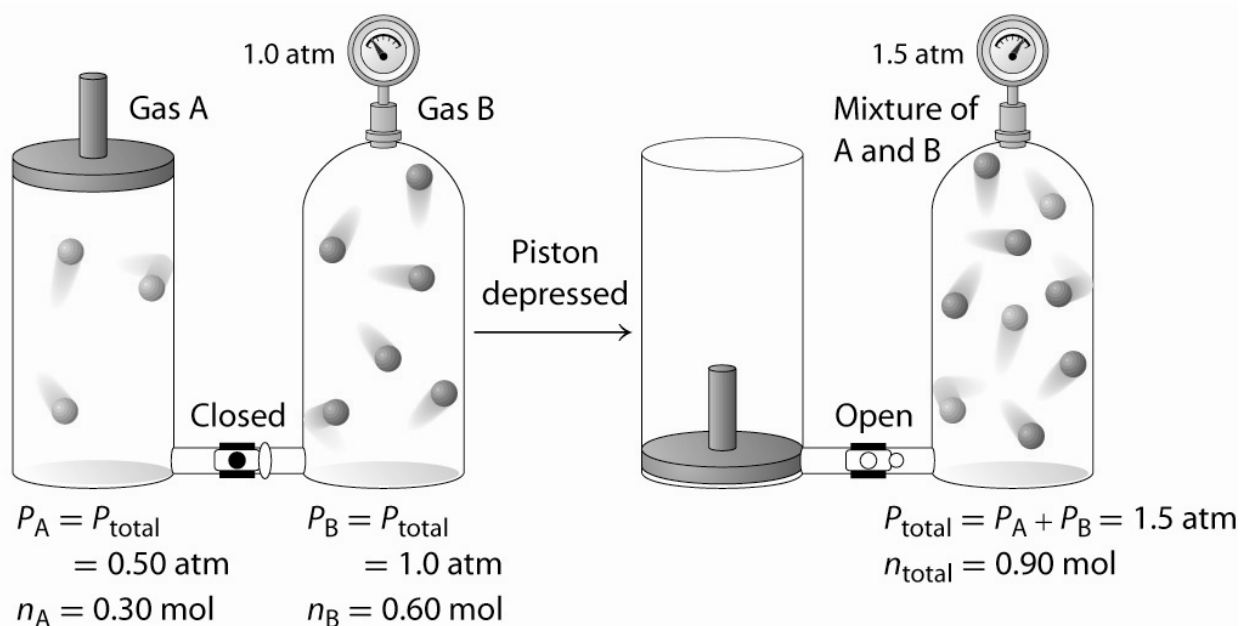


In a mixture of gases that do not react chemically, the total pressure is the sum of the partial pressures of each individual gas.



Molecules of each gas collide with the walls of the container as many times and with the same force when both gases are in the same container as the molecules did when the gases were in separate containers. Therefore, the pressure on the wall of the container of mixed gases is the sum of the pressures of the gases in separate containers.