**Z**

**Mini-quiz #27 Chemistry 1114 section 2 (Fong) 10 Nov 2014 4 pts A**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pinitial(N2) =6 atm Pinitial (H2) = 14 atm**

**V­initial (N2) = 3 Vinitial(H2) =1**

**1) Two gas volumes initially separated**

**by a closed stopcock have the**

**individual volumes and pressures shown.**

**What will be the final pressure in the two volumes once open the stopcock and let the H2 and N2 mix ?**

**VN2,2 =3+1=4=> for N2: P1V1=6\*3=P2(N2)\*4=> P2(N2)= 18/4**

**VH2,2=1+3=4 => for H2: P1V1 = 14\*1=P2(H2)\*4=> P2(H2)= 14/4**

**Sum=32/4=8**

**Pfinal = \_\_\_\_\_\_8\_\_\_\_\_\_\_\_**

**2. Circle all the features of the kinetic theory of gases in the list below**

**a) gas particles have no volume b) gas particles have no mass**

**c) gas particles undergo elastic collisions d) gas particles interact with each other**

**Mini-quiz #27 Chemistry 1114 section 2 (Fong) 10 Nov 2014 4 pts B**

**Your name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pinitial(N2) =6 atm Pinitial (H2) = 6 atm**

**V­initial (N2) = 3 L Vinitial(H2) =1 L**

**1) Two gas volumes initially separated**

**by a closed stopcock have the**

**individual volumes and pressures shown.**

**What will be the final pressure in the two volumes once open the stopcock and let the H2 and N2 mix ?**

**VN2,2 =3+1=4=> for N2: P1V1=6\*3=P2(N2)\*4=> P2(N2)= 18/4**

**VH2,2=1+3=4 => for H2: P1V1 = 6\*1=P2(H2)\*4=> P2(H2)= 6/4**

**Sum=24/4=6**

**Pfinal = \_\_\_\_\_\_\_6\_\_\_\_\_\_\_**

**2. Circle all the features of the kinetic theory of gases in the list below**

**a) gas particles have no volume b) gas particles have no mass**

**c) gas particles undergo elastic collisions d) gas particles interact with each other**