**Homework #14 Chemistry 1114 due Wed 26 Oct 2016 10 pts (in class) Show your work !!**

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

**Given: 1 atm = 760 mm Hg = 760 torr = 15 psi**

***Round answers to 2 sig figs***

**1) How many torr in 0.01316 atm ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_torr**

**2) How many psi in 253.333 torr ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ psi**

**3) How many atm in 1.5 psi ? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ atm**

**4) What gas quantity is held constant in the Combined Gas Law ?**

**5) A sample of O2 gas at constant temperature initially occupies a volume of 6 L at a**

**pressure of 2 atm. What is the pressure if the volume increases to 12 L ? (2 pts)**

**\_\_\_\_\_\_\_atm= P2**

**6) A sample of He initially at 300 K occupies 6 L at 0.5 atm. What must the new temperature be if the volume decreases to 2 L and pressure of 1 atm ? (2 pts)**

**\_\_\_\_\_\_\_\_K = T2**