**HomeWork 12**

**Due Friday 10/30/15**

**Your name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_/6**

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

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

**1) How many torr in 0.01316 atm ? \_\_\_\_\_\_10\_\_\_\_\_\_\_\_\_\_\_\_torr**

 **0.01316 atm \*760 torr/atm=**

**2) How many psi in 253.333 torr ? \_\_\_\_\_\_\_\_5\_\_\_\_\_\_\_\_\_\_ psi**

 **253.333 torr \*1 atm/760 torr \* 15 psi/atm=5**

**3) How many atm in 1.5 psi ? \_\_\_\_\_\_0.1\_\_\_\_\_\_\_\_\_\_\_ atm**

 **1.5 psi \* 1 atm/15 pis = 0.1 atm**

**4) What are the four variables used to describe gas behavior ?**

**(use symbols) n (moles)**

**V(volume)**

**T(temperature)**

 **P (pressure)**

**5) Charle’s law holds what gas variables constant ?**

**n and P**

**6) Provide an equation that captures Boyle’s law**

**P1/P2 = V2/V1 or P =b/V or P1V1=P2V2**