**Homework #9 Chemistry 1114 section 2 (Fong) due Friday 6 Oct 2017 8 pts (in class) Show your work !!**

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

**1) 2.0 grams of C are burned to make 7.333 g COx. What is the empiric formula for COx ? (at. mass C=12 g/mol; at mass O=16 g/mol)**

 **\_\_\_\_\_\_\_\_\_ COx formula**

**2) CaHb is burned in O2 to make 0.1111 g CO2 and 0.02273 g H2O.**

 **What is the empiric formula for CaHb ? (mol. mass CO2 =44 g/mol;**

 **mol. mass H2O=18 g/mol)**

 **\_\_\_\_\_\_\_\_\_ CaHb formula**

**3) Balance me:**

 **\_\_C8H18 + \_\_\_O2🡪 \_\_\_CO2 + \_\_\_H2O**

**4) A 4 gram sample of an iron oxide is heated in vacuum to produce 3.109 g of pure**

 **iron (Fe). What is the original oxide’s formula ? (at. wt of Fe=55.845 g/mol; at.**

 **wt of O=16.0 g/mol)**

 **\_\_\_\_\_\_ Fe oxide formula**