**Homework #11 Chemistry 1114 section 2 (Fong) due Friday 13 Oct 2017 6 pts (in class)**

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

**MW(g/mol): 44 32 44 18**

**Given the balanced equation: C3H8 + 5O2 🡪 3CO2 + 4H2O**

**1) How many grams of CO2 are created if 0.18939 mol of O2 and 0.0757 mol of C3H8 are burned ?**

**\_\_\_\_\_ g CO2**

**2) How many grams of H2O are created if 4.1666\*1023 molecules of C3H8 and 22.22 g**

**of O2 are burned ?**

**\_\_\_\_\_\_ g H2O**

**3) Ethanol, C2H5OH is drinking alcohol. It burns in your body according to the**

**balanced equation below:**

**MW(g/mol): 46 32 44 18**

**C2H5OH + 3O2 🡪 2CO2 + 3H2O**

**Friday night you drink 92 g of ethanol and from that you create 81 grams of water in your urine after an hour. What is the % yield (efficiency) of your body in metabolizing ethanol ?**

**\_\_\_\_\_\_\_\_\_\_\_ % efficiency (yield) of body to**

**burn ethanol**