**Mini-quiz #14 Chemistry 1114 section 2 (Fong) 1 October 2014 3 pts A**

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

**SHOW WORK FOR BOTH PROBLEMS OR NO CREDIT WILL BE ASSIGNED**

14.1 A compound with empiric formula: N2H3O has a molecular mass of 188 g/mol. Given the atomic

masses (g/mol) : N=14, H=1, O=16, what is the molecular formula of the compound ?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ molecular formula

14.2. A hydrocarbon, CxHy, is burned to yield 132 g CO2 (MW=44 g/mol) and 45.0 g H2O(MW=18).

What is the empiric formula of CxHy ?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ empiric formula for CxHy

**Mini-quiz #14 Chemistry 1114 section 2 (Fong) 1 October 2014 3 pts B**

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

**SHOW WORK FOR BOTH PROBLEMS OR NO CREDIT WILL BE ASSIGNED**

14.1 A compound with empiric formula: C3H5O has a molecular mass of 285 g/mol. Given the atomic

masses (g/mol) : C=12, H=1, O=16, what is the molecular formula of the compound ?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ molecular formula

14.2. A hydrocarbon, CxHy, is burned to yield 176 g CO2 (MW=44 g/mol) and 90 g H2O(MW=18).

What is the empiric formula of CxHy ?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ empiric formula for CxHy