**Homework #7 Chemistry 1114 Spring 2018 (Fong) due Friday 9 March 2018 8 pts (in class)**

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

**Note: assume C=12 H=1 O=16 N = 14 (units in g/mol)**

**1) Compound Dick is composed of 0.5333 g C, 0.1111 g H and 0.35555 g O.**

 **What is Dick’s empiric formula ? (2 pts)**

 **\_\_\_\_\_\_\_\_\_\_Dick’s empiric formula**

**2) Compound Jane is composed of 5.4545 g C, 1.3636 g H and 3.1818 g N.**

 **Jane’s molecular weight is 220 g/mol. What is Jane’s molecular formula? (3 pts)**

 **\_\_\_\_\_\_\_\_\_\_\_Jane’s molecular formula**

**3) The % C, H and O in vanilla are, respectively: 63.15 % 5.27 % and 31.58 %.**

 **What is the empiric formula of vanilla ? (3 pts)**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ empiric formula of vanilla**