Chapter 2 HOMEWORK #1  
given out August 16, 2019  
To Be Collected in Breakout August 20, 2019

To be discussed: Tuesday, August 20, 2019 in Breakout Session

1. Use the information in Figure 2.11 (page 28) to show how you derive the pKa from the Ka for:

   a) Glycine

   b) bicarbonate

2. Calculate the ratio of conjugate base/weak acid (i.e. HC00-/HC00H) for formic acid at the following pH. Note: the pKa is 3.8

   a) pH 7.0.

   b) pH 1

3. Do the following problems:  
   Edition 4 : Chapter #1: 1, 4, 5, 7, 9, 12;  Chapter 2: # 1-18, 20, 22, 23