Name _____

Period _____

1) Calculate the pH of each of the following solutions
   a. 0.100 M propanoic acid ($HC_3H_5O_2$, K_a = 1.3 X 10^{-5})
   b. 0.100 M sodium propanoate ($NaC_3H_5O_2$)
   c. pure water
   d. A mixture containing 0.100 M $HC_3H_5O_2$ and 0.100 M $NaC_3H_5O_2$

2) Calculate the pH after 0.020 moles HCl is added to 1.00 L of each solution in #1

3) Calculate the pH after 0.020 moles of NaOH is added to 1.00 L of each solution in #1.