Unit 9 – Chapter 15: Assignment #1   **Name** _____

                                                        Period _____

1) Calculate the pH of each of the following solutions.
   - a. 0.100 M HONH$_2$ (K_b = 1.1 X 10^{-8})
   - b. 0.100 M HONH$_3$Cl
   - c. pure H$_2$O
   - d. a mixture containing 0.100 M HONH$_2$ and 0.100 M HONH$_3$Cl

2) Calculate the pH after 0.020 mol HCl is added to 1.00 L of each of the four solutions in #1.

3) Calculate the pH of a solution that is 0.60 M HF and 1.00 M KF.

4) Calculate the pH after 0.10 mol of NaOH is added to 1.00 L of the solution in problem #3, then calculate the pH after 0.20 mol of HCl is added to 1.00 L of the solution in problem #3.