Chem 12

## WS 4.15 WEAK BASE PROBLEM SET

Name: $\qquad$

1. Calculate the Kb for of $\mathrm{HCO}_{3}{ }^{-}$.
2. Calculate the pH of 0.01 M NaF .
3. What is the initial concentration of the weak base $\mathrm{SO}_{3}{ }^{2-}$ if the final $\mathrm{pH}=9.69$ ?
4. What is the pH of 0.50 M NaCN ?
5. The pH of a 0.1 M solution of NaX is 8.85 . Calculate the Kb of the base $\mathrm{X}^{-1}$.
6. Using the information above, calculate the Ka of the acid HX.
7. A 0.18 M solution of a weak base has a pH of 8.95. Calculate the Kb of the base.
