The K_a & K_b Relationship

Example One

Using the tables above, determine the K_b value for the weak base F^-.

Example Two

Calculate the K_a for the ammonium ion (NH_4^+) given the tables above.

Example Three

What is the pH of a 0.10 M solution of $C_2H_3O_2^-$?

The K_a for $HC_2H_3O_2$ is $=1.8x10^{-5}$

Example Four

What is the pH for a 0.10 M solution of NO_2^- ions? The K_a for HNO_2 is 7.1×10^{-4} ?

Example Five

What is the pH for a 1.0 M solution of NH_4^+ ? The K_b for NH_3 is $1.8x10^{-5}$?