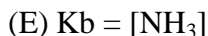
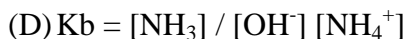
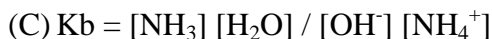
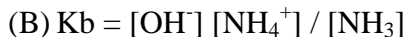
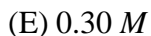
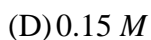
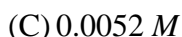
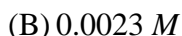
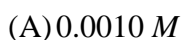


Primary Topics of Equilibrium Part 2 – Vodcast E-Quiz

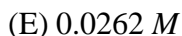
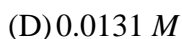
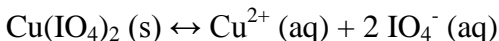
1) Determine the expression for the equilibrium constant, K_b , for a weak acid like NH_3 .



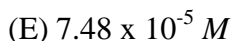
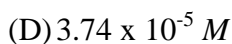
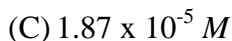
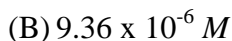
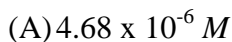
2) Calculate the molar concentration of a 0.30 M solution of acetic acid, $\text{HC}_2\text{H}_3\text{O}_2$, given the chemical reaction below. K_a for acetic acid is 1.8×10^{-5} .



3) Calculate the concentration, in mol L^{-1} , of $\text{IO}_4^- (\text{aq})$ in a saturated solution of $\text{Cu}(\text{IO}_4)_2$ given the $K_{sp} = 1.40 \times 10^{-7}$ according to the following reaction.

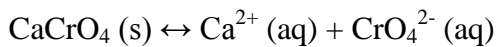


4) Given 0.10 M COCl_2 , what is the equilibrium concentration of CO given $K_c = 2.19 \times 10^{-10}$ according to the following chemical reaction.



Primary Topics of Equilibrium Part 2 – Vodcast E-Quiz

- 5) The reaction below has an equilibrium constant $K_{sp} = 7.1 \times 10^{-4}$. Calculate the equilibrium concentration of Ca^{2+} (aq).



- (A) 0.00036 *M*
- (B) 0.00071 *M*
- (C) 0.013 *M*
- (D) 0.027 *M*
- (E) 0.054 *M*