

Exam 2 common mistakes

$K_{sp} = (2x)^2(x)$, is $K_{sp} = 4x^3$

K_a is used an acid (or conjugate acid), K_b is used with a base (or conjugate base)

Protonated form of a base (B) , BH^+ use K_a

When finding ΔH or ΔS forgetting a negative sign

ΔS is J/K so remember to convert to kJ when finding ΔG

If $\Delta H < 0$ and $\Delta S > 0$, the reaction is spontaneous at any temperature

$\Delta G^\circ = -RT \ln K$, if the ΔG° is negative K should be > 1