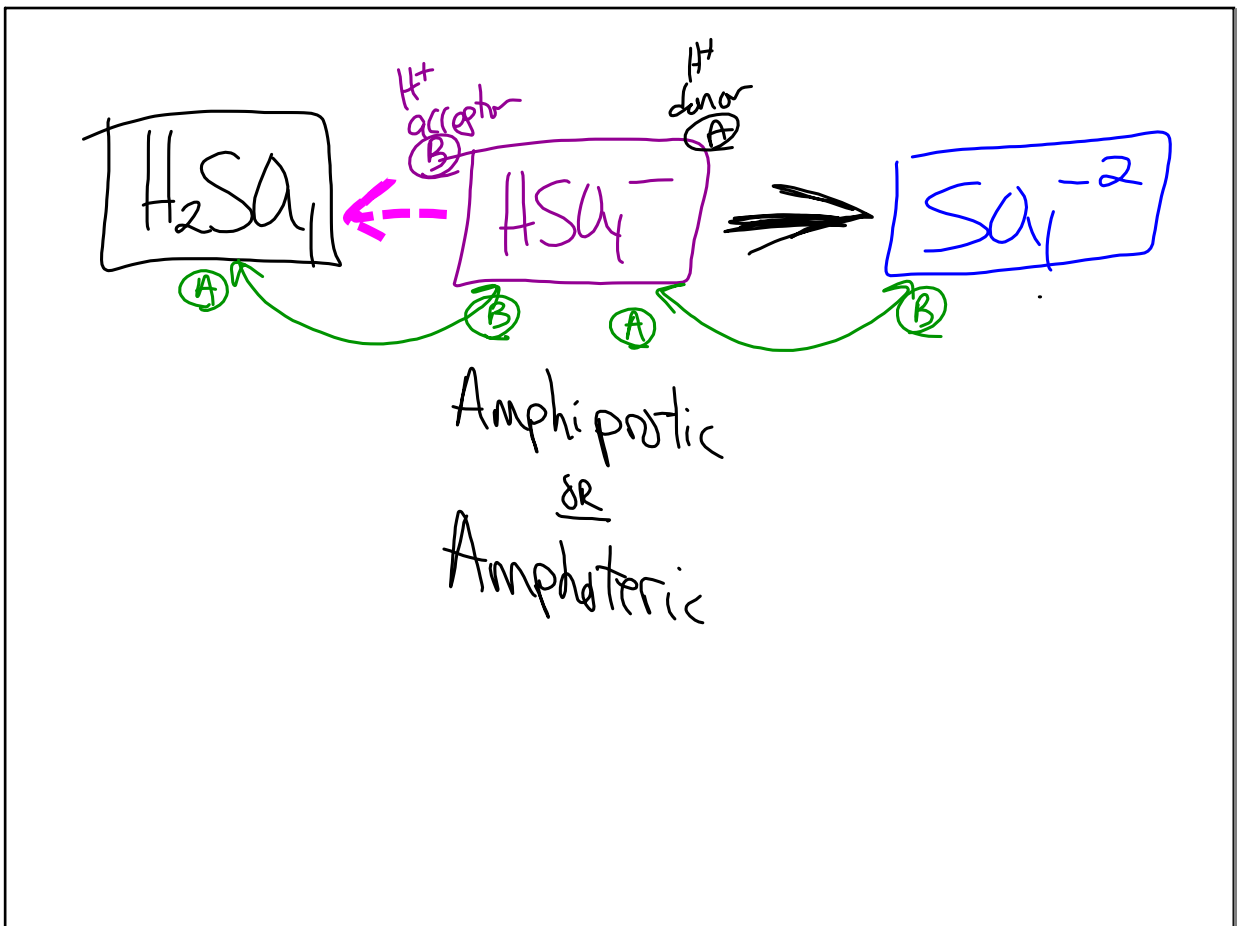
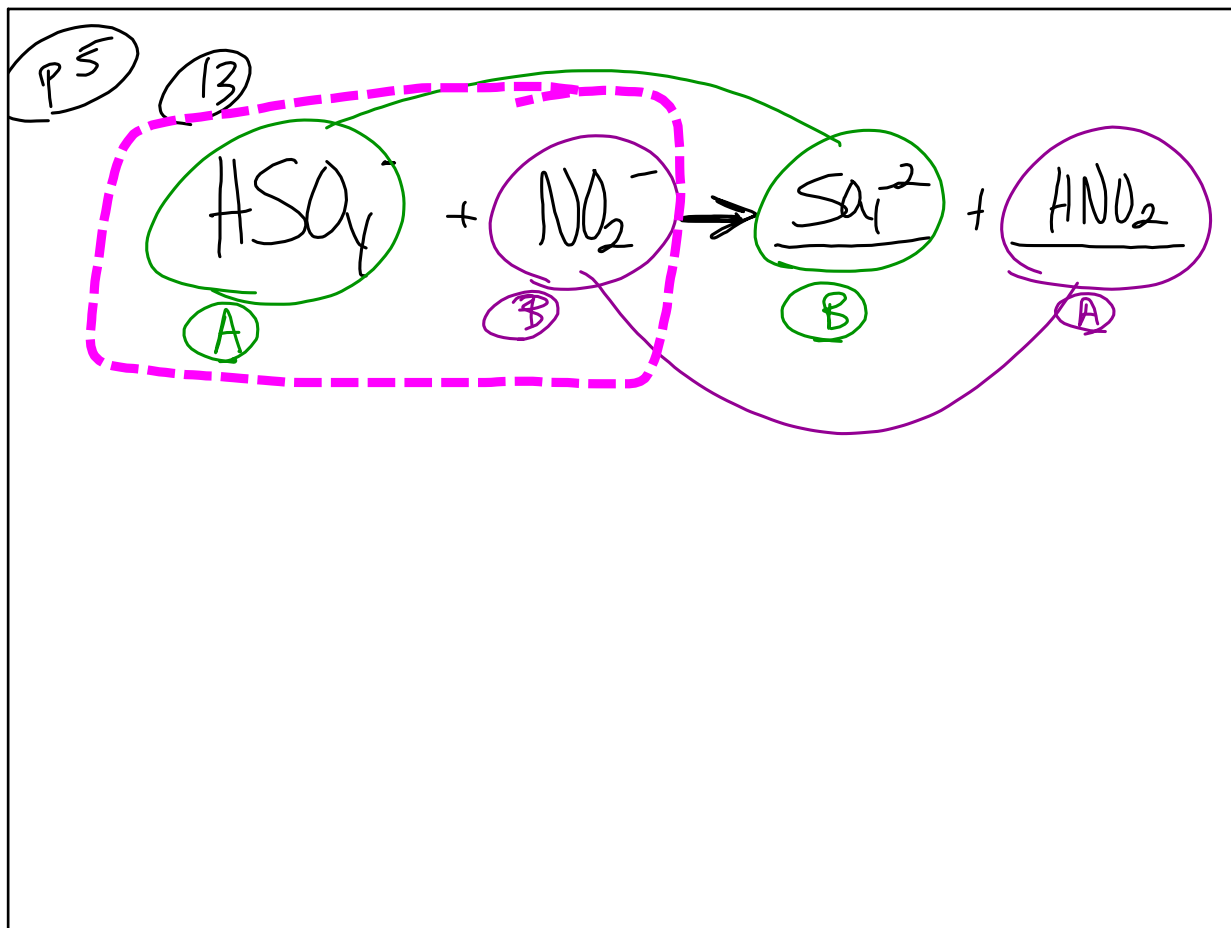


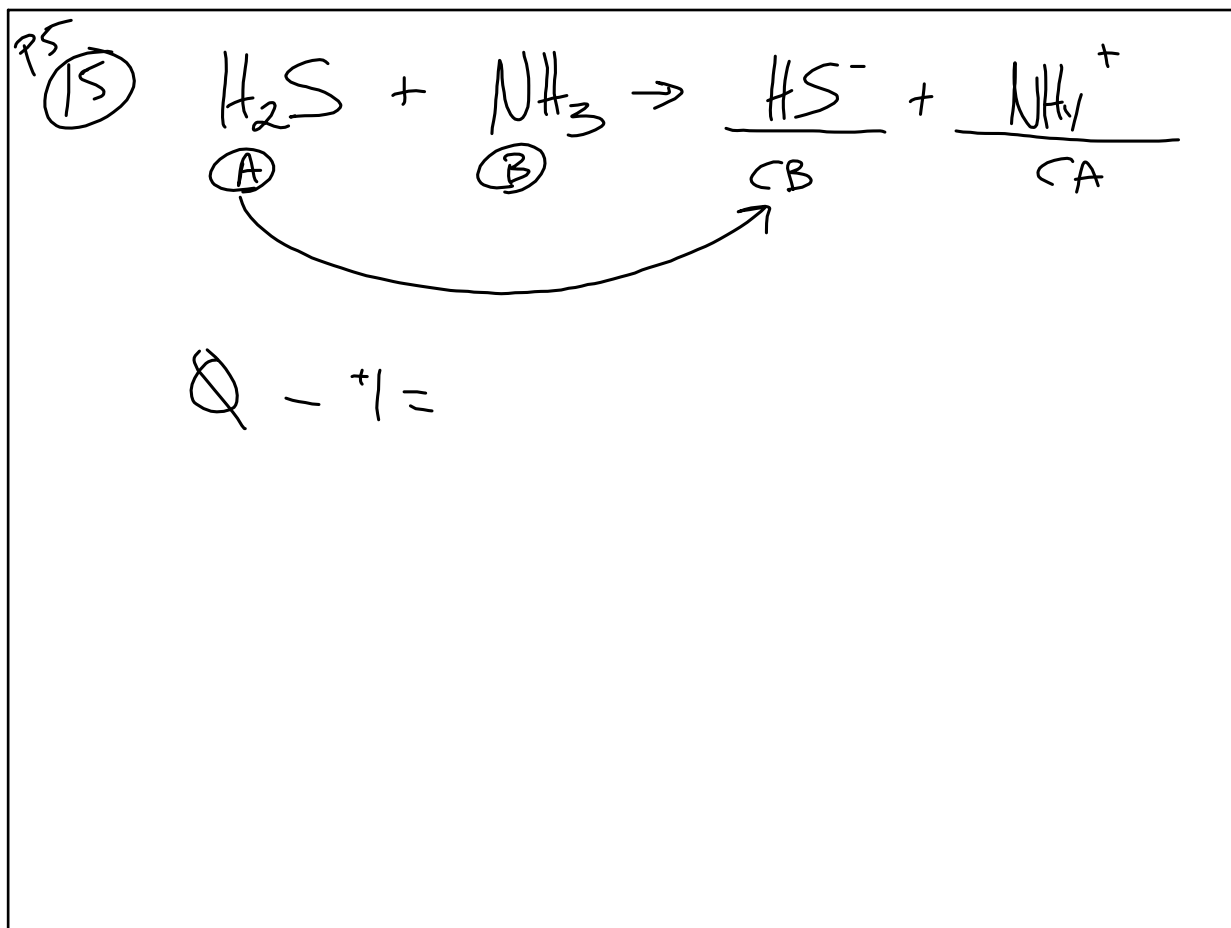
Apr 19-8:31 AM



Apr 19-8:59 AM



Apr 19-9:04 AM



Apr 19-9:11 AM

$HCl \rightleftharpoons H^+ + Cl^-$ 99.99+ %
 Dissociate - Split up into ions

STRONG ACID (Lots of H^+)
 HCl must dissociate to get the H^+ $\approx 100\%$
 HCl, HBr, HI, HNO_3 , H_2SO_4 , $HClO_3$ + $HClO_4$

Strong base \rightarrow (lots of OH^-)
 dissociate nearly 100% to give OH^-
 Group 1 (OH^-) (excluding H), Group 2 (OH^-)₂
 NaOH, KOH, ...

Apr 19-9:44 AM

$HCl_{(aq)} \rightleftharpoons H^+_{(aq)} + Cl^-_{(aq)}$

$K_a = \frac{[H^+][Cl^-]}{[HCl]}$

Acid \rightarrow K_a

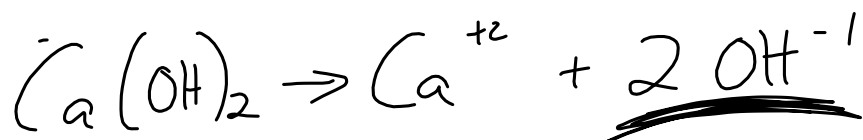
LOTS \rightarrow $[H^+][Cl^-]$

React. \rightarrow $[HCl]$

very little \rightarrow $[HCl]$

STRONG ACID \rightarrow Large K_a
 Strong Base \rightarrow Large K_b

Apr 19-9:56 AM



$$K_b = \frac{[\text{Ca}^{+2}] [\text{OH}^{-}]^2}{[\text{Ca(OH)}_2]} \quad \frac{\text{Prod}}{\text{React}}$$

\rightarrow
 $\text{Ca(OH)}_2 = \text{SB}$

Apr 19-10:00 AM

PS #2 a → f

PSB #1, 2, 3

P9

Apr 19-10:03 AM