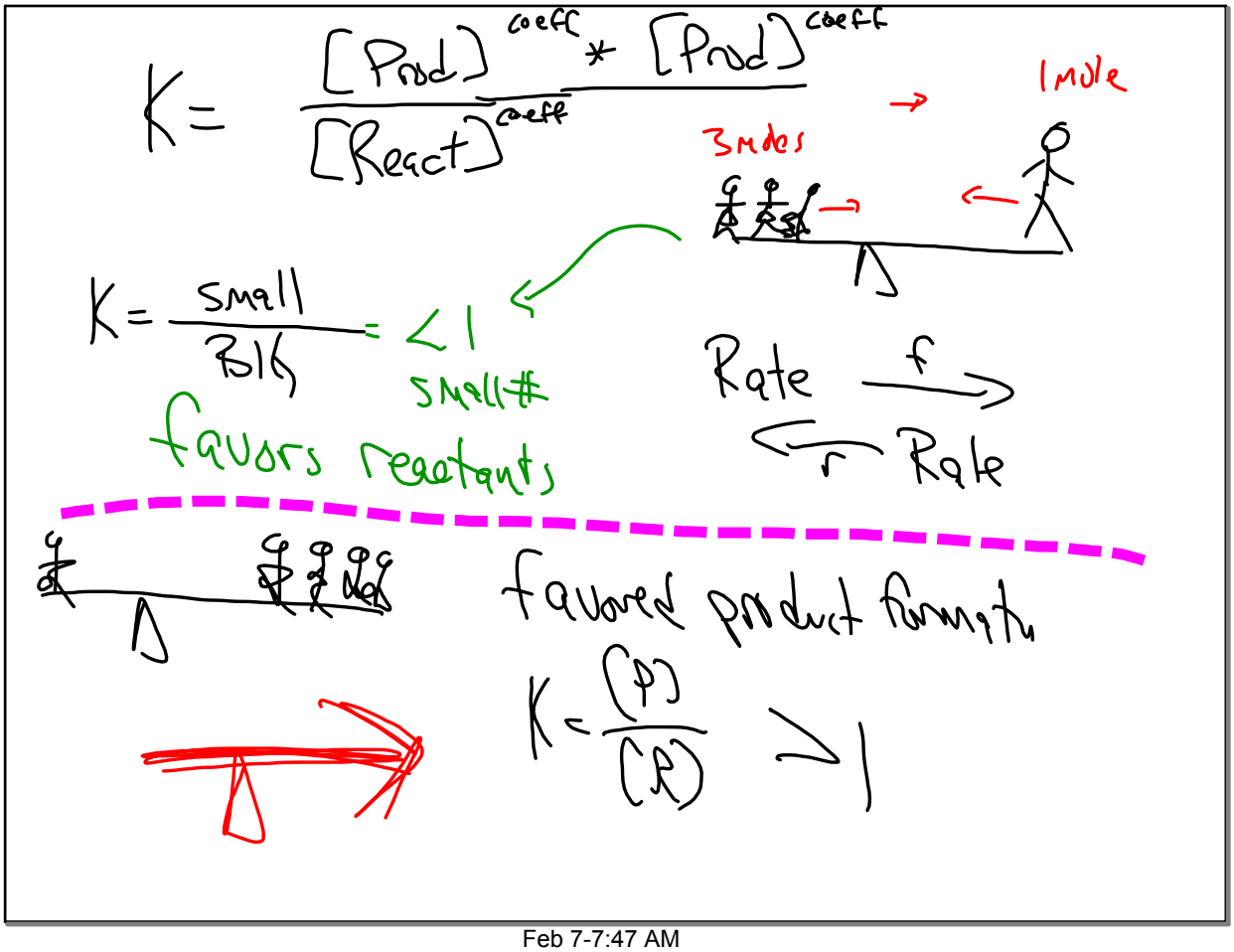
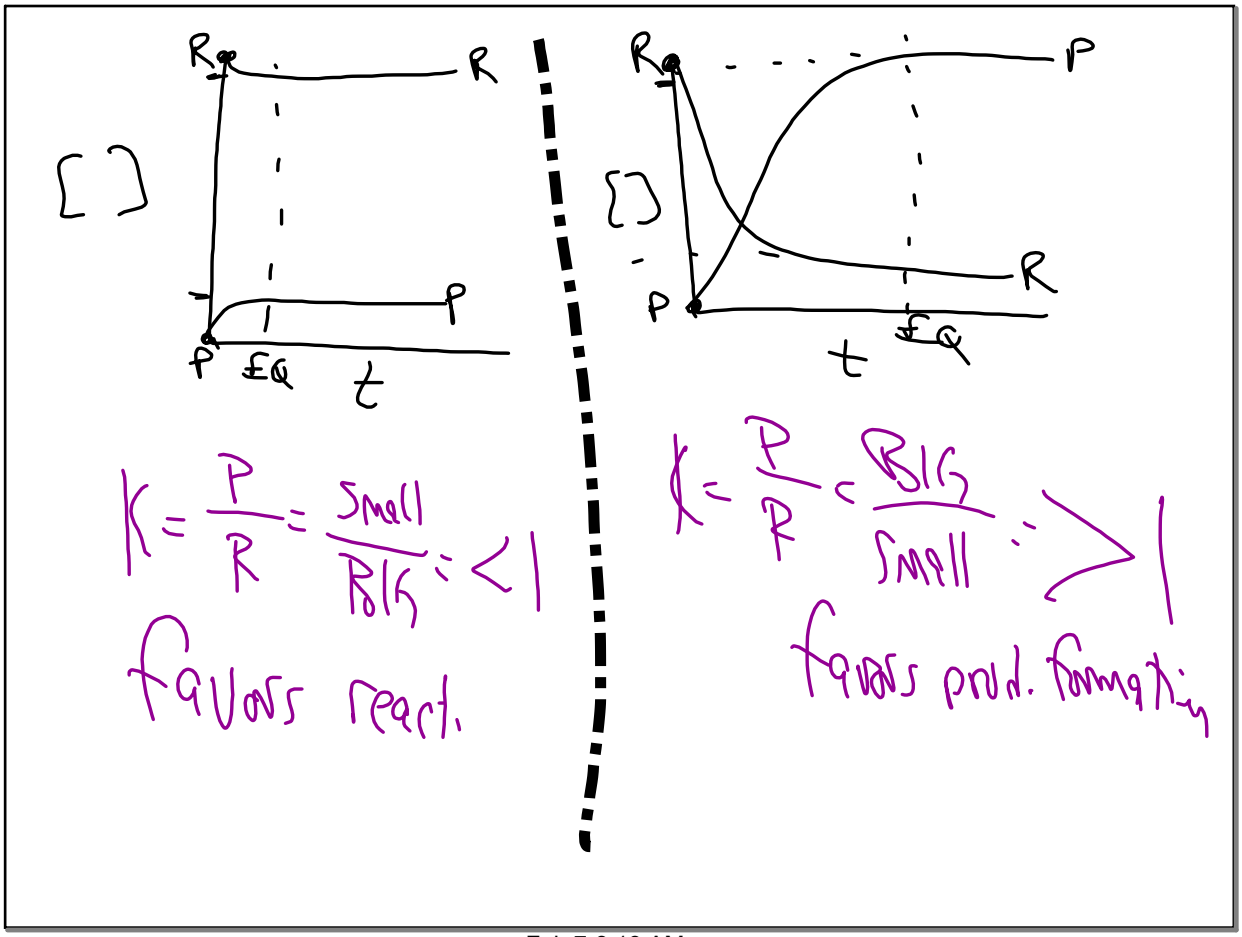
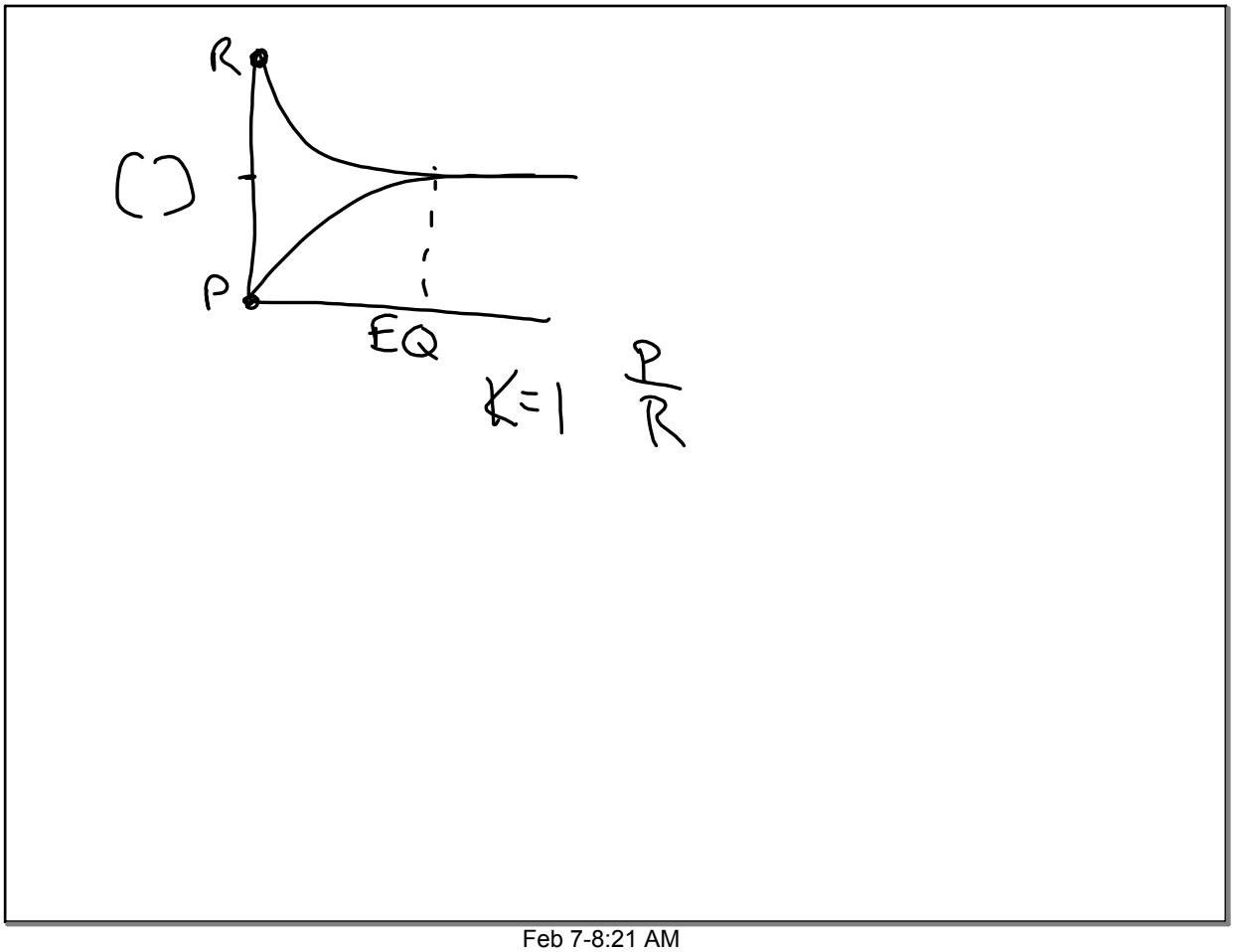


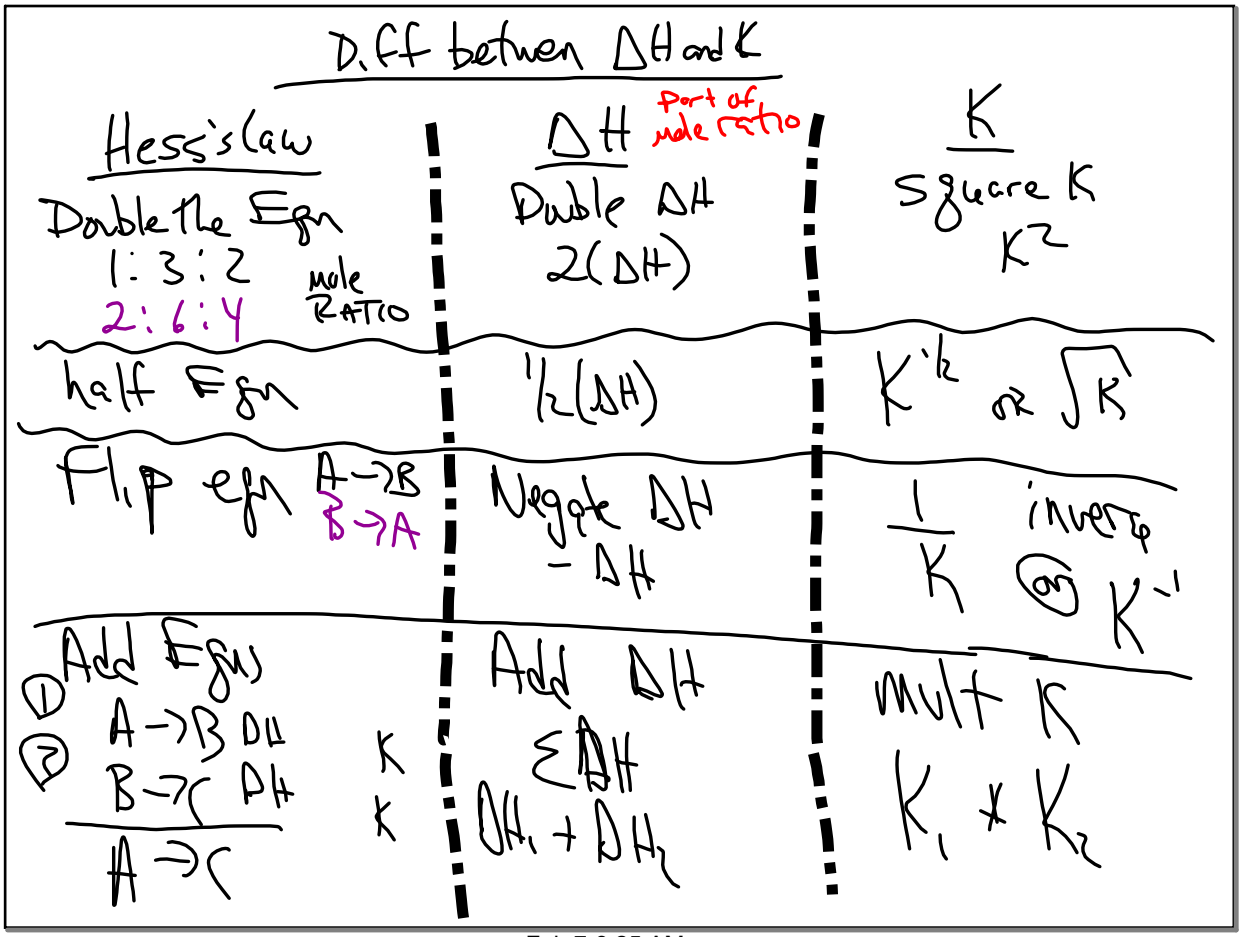
Feb 7-7:47 AM



Feb 7-8:18 AM



Feb 7-8:21 AM



Feb 7-8:25 AM

POWER / ROOT

$K^{\frac{1}{2}} = \sqrt{K^1}$

$\sqrt{2x+3y+z}$

$K^{\frac{2}{3}}$ $\quad \sqrt[3]{K^2}$

Feb 7-8:30 AM

React → Prod
A → B

$K_f = \frac{[Prod]}{[React]} = \frac{[B]}{[A]}$

Prod → React
B → A

$K_r = \frac{[React]}{[Prod]} = \frac{[A]}{[B]}$

$\frac{K_f}{1} = \frac{1}{K_r}$

Feb 7-8:33 AM

K_c (or K_{eq}) aq solns, M (mole/L)

K_p gas Pressure mmHg/torr, atm, kPa

760, 1, 101.3

Feb 7-8:35 AM

$PV = \frac{n}{V}RT$ $R = 0.08206 \frac{L \cdot atm}{mole \cdot K}$

$P = MRT$

$K = \frac{[P]}{[R]}$

$K_p = K_c (RT)^{\Delta n}$

Change in Mole; Total Mole, Product − Total mole, React.

Feb 7-8:38 AM

$N_{2(g)} + 3H_{2(g)} \rightarrow 2NH_{3(g)}$

$K_c = 9.6$ at $300^\circ C$

Find K_p

$\Delta n = 2 - 4 = -2$

$K_p = K_c(RT)^{\Delta n}$

$= 9.6\left[(0.08206)(573)\right]^{-2}$ (KELVIN!)

$K_p = 0.004$

Feb 7-8:41 AM

Δ Change $[R]$ decreases

$[P]$ increases

from $t = 0 \Rightarrow t = t$ EQ

Tables

R Balanced Reaction

I [Initial] or $P_{initial}$

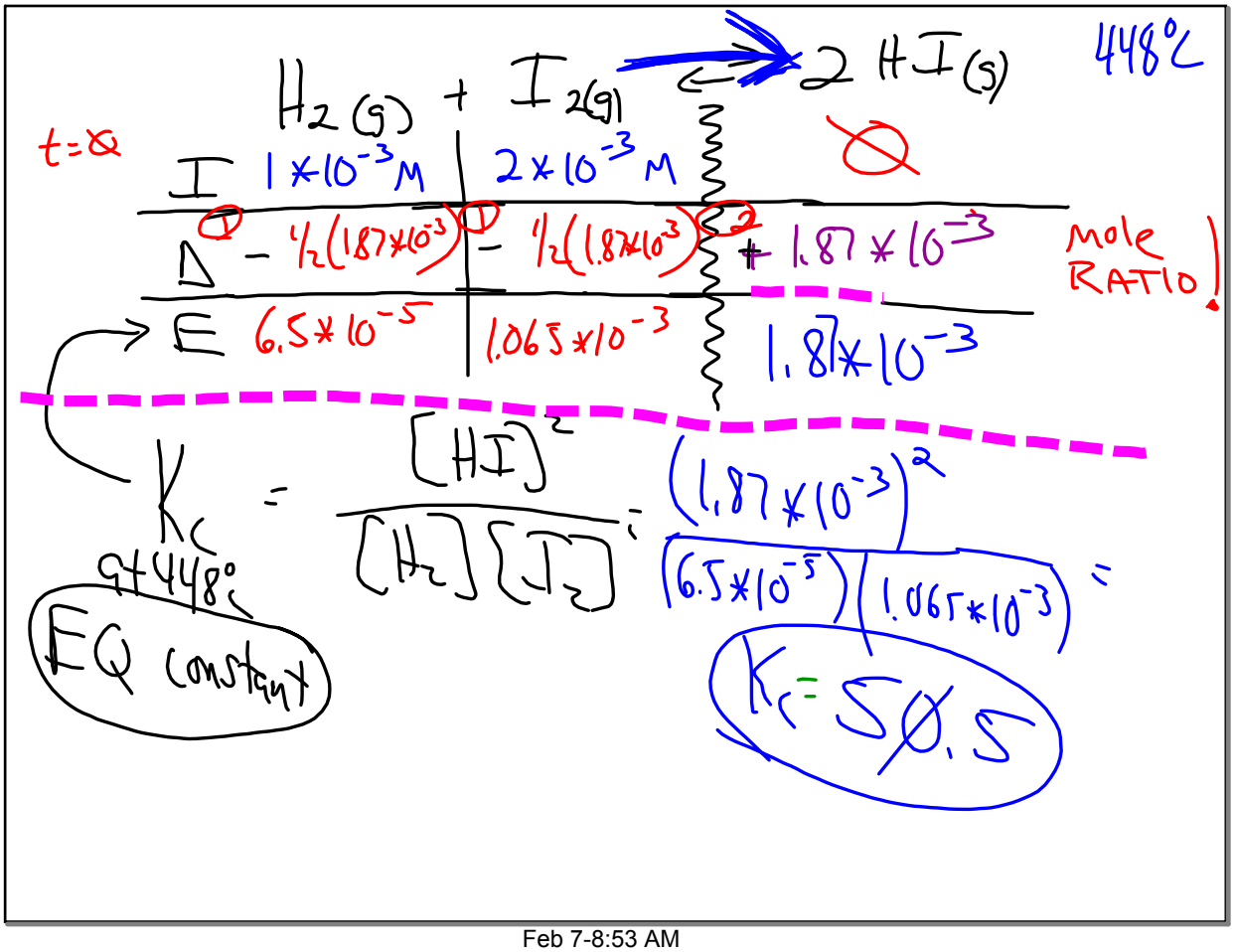
C change in [] or P

E Equilibrium [] or P

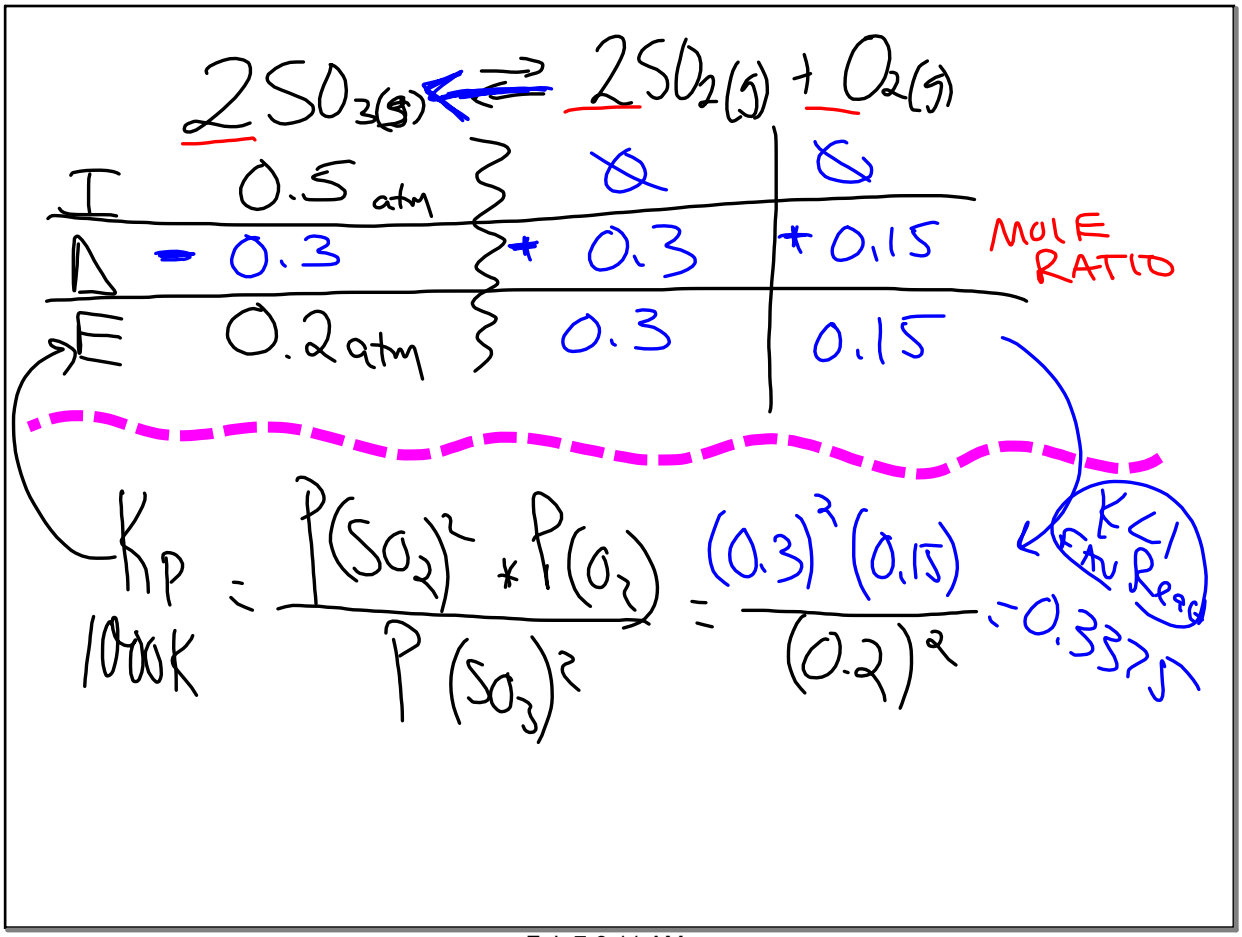
Start → Difference → End

Used to calc K_c or K_p

Feb 7-8:46 AM



Feb 7-8:53 AM



Feb 7-9:11 AM

$K_p = 0.3375$ $\Delta n = 1$

$K_p = K_c (RT)^{\Delta n}$

$\frac{0.3375}{82.06} = K_c \left[\frac{(0.08206)(1000)}{82.06}\right]^1$

$K_c = 0.00411$

Feb 7-9:19 AM

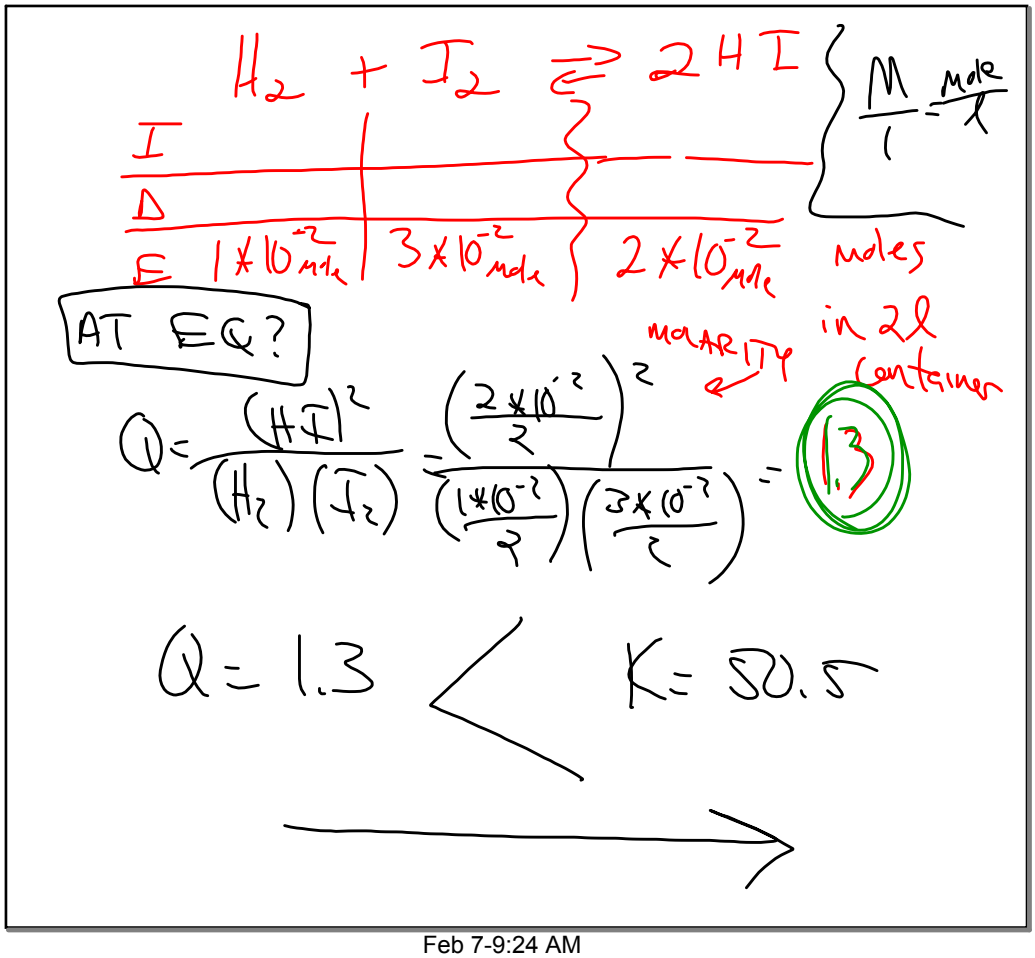
$K \rightarrow$ AT EQ! K_c $\frac{[P]}{[R]}$ Q_c $Q =$ unsure if at EQ

If $K = Q$ AT EQ

If $Q > K$ ←

If $Q < K$ →

Feb 7-9:21 AM



Feb 7-9:24 AM

PS15 # 1-12

23-25

Feb 7-9:30 AM