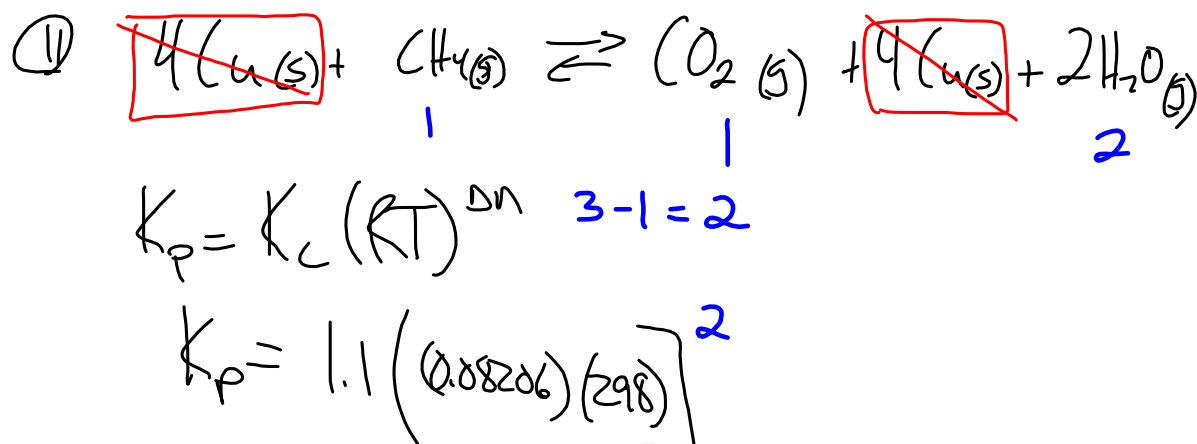


⑩ Flip $\times 3$

$$K \Rightarrow \frac{1}{K} \rightarrow \left(\frac{1}{K}\right)^3 = \frac{1^3}{K^3} = \frac{1}{K^3}$$

Feb 15-7:38 AM



Feb 15-7:52 AM

$$\text{N}_2\text{O}_4(\text{g}) \rightleftharpoons 2\text{NO}_2(\text{g})$$

I	0.4 M		
Δ	-0.3945	+0.789	← Mole Ratio
E	0.0055 M		

0.789

$$K_c = \frac{(\text{NO}_2)^2}{(\text{N}_2\text{O}_4)} = \frac{(0.789)^2}{0.0055}$$

Feb 15-7:56 AM

$$\text{CaCO}_3 + \text{HEAT} \rightleftharpoons \text{CaO} + \text{CO}_2$$

→

(A) → ~~→~~
 (B) ← ~~←~~
 (C) ←

Feb 15-7:59 AM

(14) $C_6H_6 + 3H_2 \rightleftharpoons C_6H_{12}$

I	0.005 $\left(\frac{1}{200}\right)$	0.015 $\left(\frac{3}{200}\right)$	
Δ	-6.85×10^{-4}	$-3(6.85 \times 10^{-4})$	$+6.85 \times 10^{-4}$
E	0.004315	0.012945	6.85×10^{-4}

MOLE FRACTION $\frac{0.137}{200}$

$$K = \frac{(C_6H_{12})}{(C_6H_6)(H_2)^3}$$

Feb 15-8:03 AM

(16) $SO_2Cl_2 \rightleftharpoons SO_2 + Cl_2$

I	0.034 M		
Δ	$-x$	$+x$	$+x$
E	$0.034 - x$	x	x

$x = 0.0108$

$$K = \frac{(SO_2)(Cl_2)}{(SO_2Cl_2)} = \frac{5 \times 10^{-3}}{1} = \frac{x^2}{0.034 - x}$$

~~$x = -0.0158$~~
 $x = 0.0108$

$$x^2 + 5 \times 10^{-3}x - 1.7 \times 10^{-4} = 0$$

Feb 15-8:08 AM

$$\textcircled{P} \quad \ln A_t = -Kt + \ln A_0$$

$$\ln(0.391) = -2.44 t + \ln 1$$

$$t = 0.385 \text{ hr}$$

Feb 15-8:14 AM

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

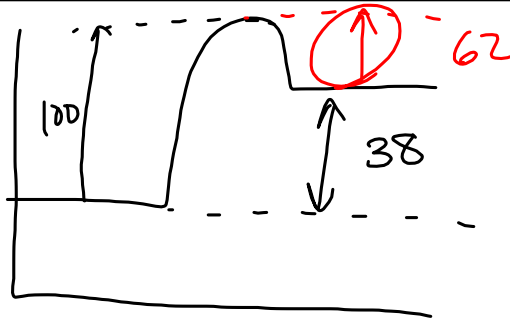
$$K_p = K_c (RT)^{-2}$$

~~$$\frac{K_p}{t} = \frac{K_c}{(RT)^2}$$~~

$$K_c = K_p (RT)^2$$

Feb 15-8:17 AM

②



Feb 15-8:19 AM

②③

$$\frac{L}{A_t} = Kt + \frac{L}{A_0}$$

$$\frac{L}{A_t} = (1.2 \times 10^{-2})(1800) + \frac{L}{0.045}$$

$$\frac{L}{A_t} = 43.8277$$

$$A_t = \frac{L}{43.8277} = 0.023$$

Feb 15-8:20 AM

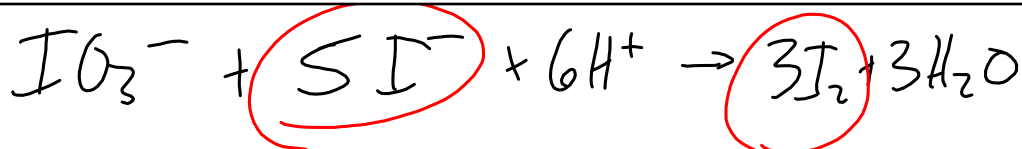
(24)

$$t_{1/2} = \frac{1}{k[A_0]}$$

$$= \frac{1}{(1.2 \times 10^{-2})(0.3)} = 277.78 \text{ Sec}$$

$$4.63 \text{ min}$$

Feb 15-8:23 AM



$$\frac{3}{1} \times -\frac{1}{5} \frac{\Delta[\text{I}^-]}{\Delta t} = \frac{1}{3} \frac{\Delta[\text{I}_2]}{\Delta t} \times \frac{3}{1}$$

$$\frac{3}{5} \frac{\Delta[\text{I}^-]}{\Delta t} = \frac{\Delta[\text{I}_2]}{\Delta t}$$

$$\frac{3}{5} (5 \times 10^{-3}) = 3 \times 10^{-3}$$

Feb 15-8:24 AM