

PS 21-1  $\frac{44}{19}K$   $t_{1/2} = 22 \text{ min}$ ,  $lg \rightarrow \text{—}g$  after 66 min

$$\ln A_t = -kt + \ln A_0$$

$$\ln A_t = -(0.0315)(66) + \ln 1$$

$$\frac{\ln I}{I} = \frac{0.693}{t_{1/2}}$$

Apr 20-7:31 AM

E3  
⑪

$S, H, T$   
Given

$\Delta G = \Delta H - T\Delta S$   
Find.

$$\Delta G = -RT \ln K$$

Apr 20-8:01 AM

(18)

$$E = E^\circ - \frac{RT}{nF} \ln Q$$

$$E = +0.763 - \frac{(8.314)(298)}{2(96500)} \ln Q$$

$$\begin{aligned} \text{Zn}^0 &\rightarrow \text{Zn}^{+2} + 2e^- && +0.763 \\ 2\text{H}^+ + 2e^- &\rightarrow \text{H}_2 && \otimes \\ \hline \text{Zn(s)} + 2\text{H}^+_{(aq)} &\rightarrow \text{Zn}^{+2}_{(aq)} + \text{H}_{2(g)} && +0.763\text{V} \end{aligned}$$

$$Q = \frac{(\text{Zn}^{+2})(\text{H}_2)}{(\text{H}^+)^2}$$

$$Q = \frac{(1)(1)}{(0.00)^2}$$

Apr 20-8:08 AM

(23)

$$\text{Fe} \quad \text{Ni}^{+2} + 2e^- \rightarrow \text{Ni}^0 \quad -0.250\text{V}$$

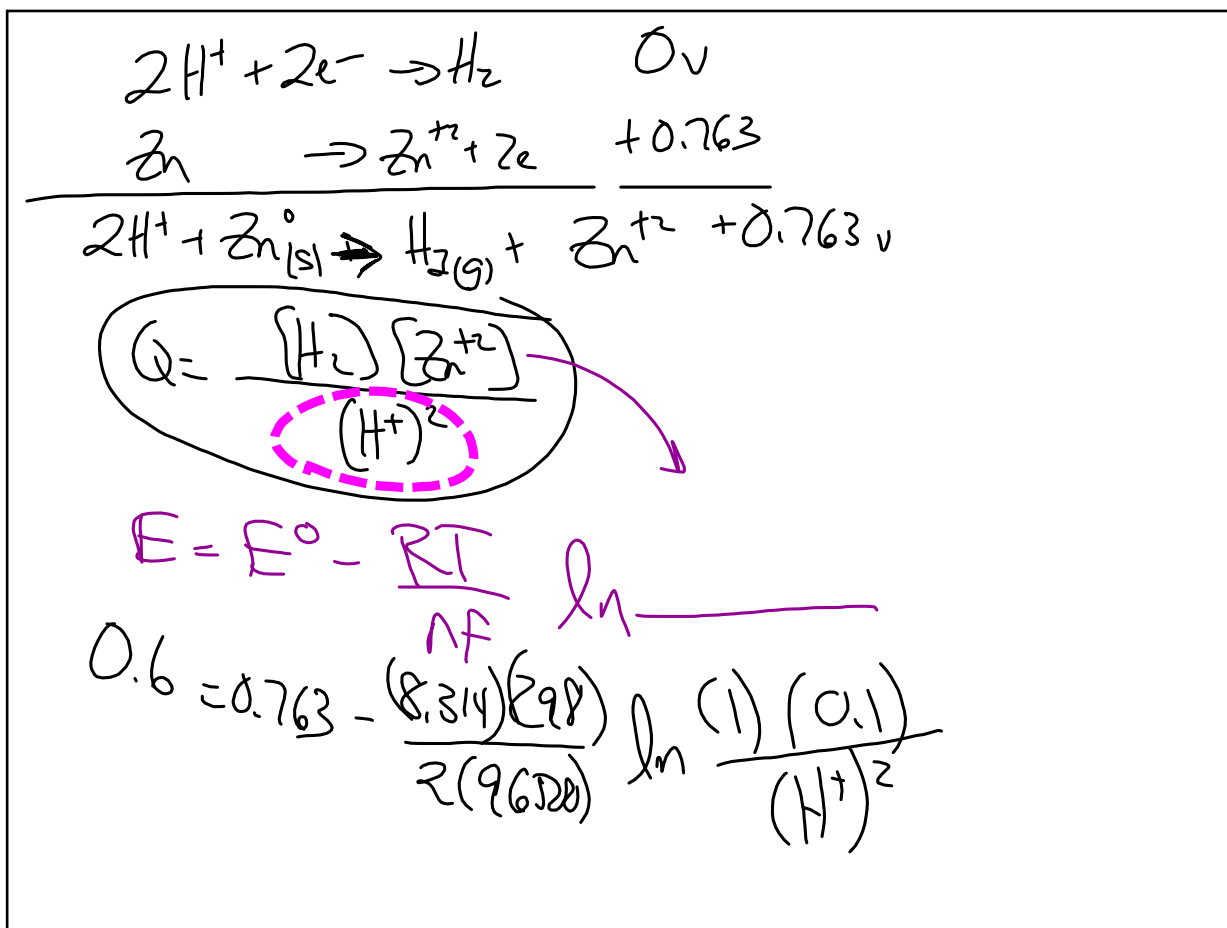
$$\text{Al}^0 \rightarrow \text{Al}^{+3} + 3e^- \quad +1.66\text{V}$$


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$E^\circ = +1.41\text{V}$

Spont

Apr 20-8:14 AM



Apr 20-8:18 AM

ORGO - Carton

(HW) ORGO "Reseat" Packet  
 → Read p1  
 → Do p. 3, 4, 6+7#1-7

Apr 20-8:23 AM