

$\frac{x}{y}$ $\frac{\text{Power}}{\text{root}}$

$X^{1/2}$ \sqrt{X}

$Y^{3/4}$ $\sqrt[4]{Y^3}$

May 1-8:43 AM

⑦ $\oplus \Delta H$

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

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Spont.

\oplus

High T

\otimes

May 1-9:00 AM

⑧ WA → Need RTCE TABLE

| | | | | |
|---------|---|------------------|---|-------------------|
| 1 HCN | ⇌ | 1 H ⁺ | + | 1 CN ⁻ |
| I 0.2 | | Q | | Q |
| -x | | +x | | +x |
| E 0.2-x | | (x) | | x |

MOLE RATIO →

$$K_a = \frac{[H^+][CN^-]}{[HCN]} = \frac{(x)(x)}{0.2-x} = 4.9 \times 10^{-10}$$

$x = 9.9 \times 10^{-6} = [H^+]$

$pH = -\log [H^+]$

May 1-9:02 AM

⑨ Table

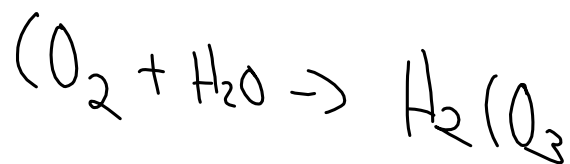
$$E = E^{\circ} - \frac{RT}{nF} \ln Q$$

$$E = 1.10 - \frac{(8.314)(298)}{2(96500)} \ln \frac{0.05}{5}$$

$$Q = \frac{[Zn^{2+}]}{[Cu^{2+}]} = \frac{0.05}{5}$$

$Zn(s) + Cu^{2+} \rightarrow Zn^{2+} + Cu(s)$

May 1-9:06 AM



May 1-9:15 AM