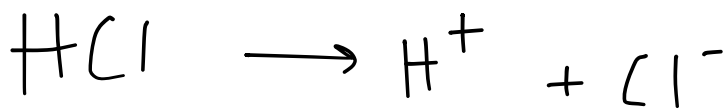


+6

+6

✓



∅

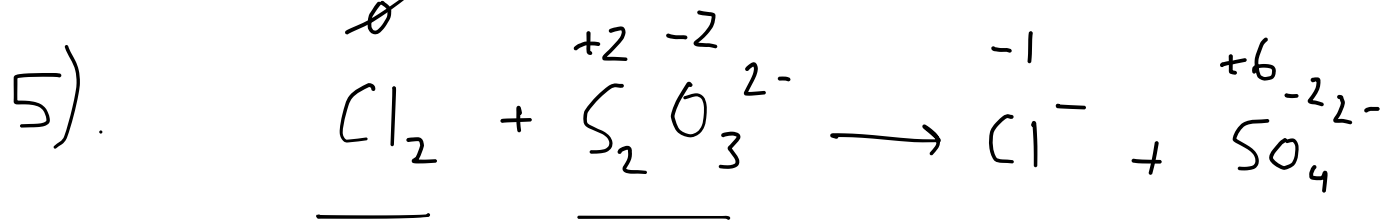
∅

$$2 \times \begin{array}{c} -6 \\ +6 \end{array} = \begin{array}{c} -2 \\ +6 \end{array}$$

$$2(\underline{\quad}) + 3\left(\begin{array}{c} -2 \\ 0 \end{array}\right) = -2$$

Σ

$$x - 8 = -2$$



Cl gained $1e^-$

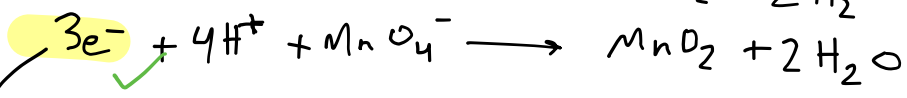
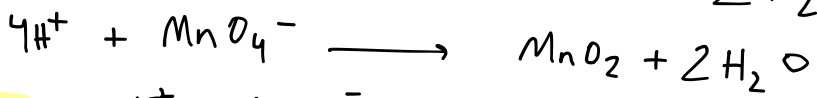
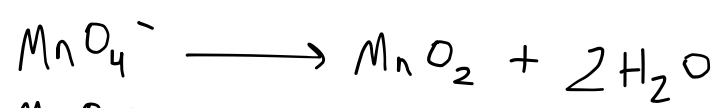
S lost $4e^-$

OA: the species that drives the oxidation of another species
 ↳ itself is being reduced
 "e⁻ sink"

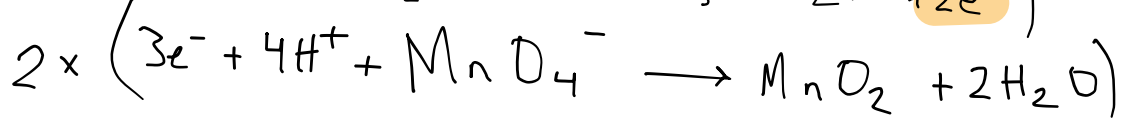
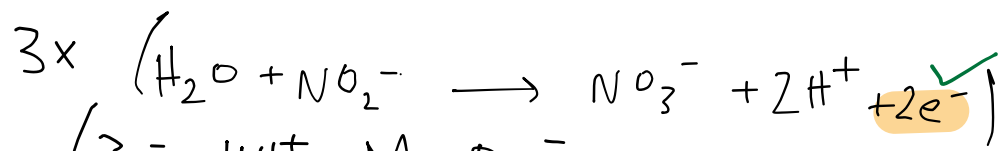
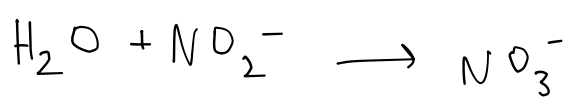
RA: the species that drives the reduction of another species
 ↳ itself is being oxidized
 ↳ provides the e⁻ for other reactant
 "e⁻ source"

Reagent is the same word as reactant

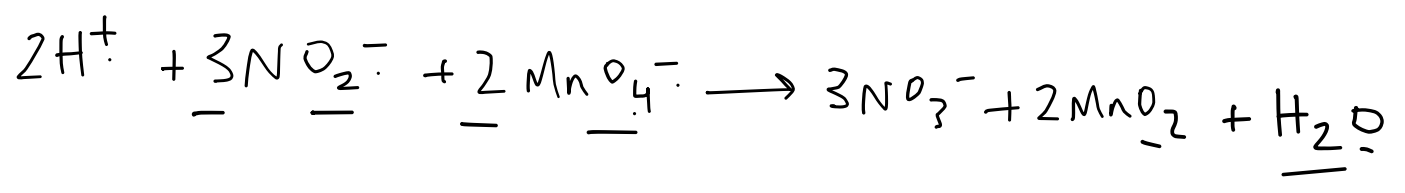
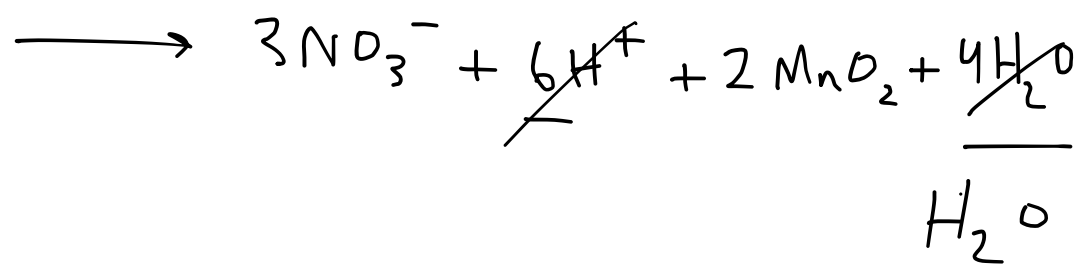
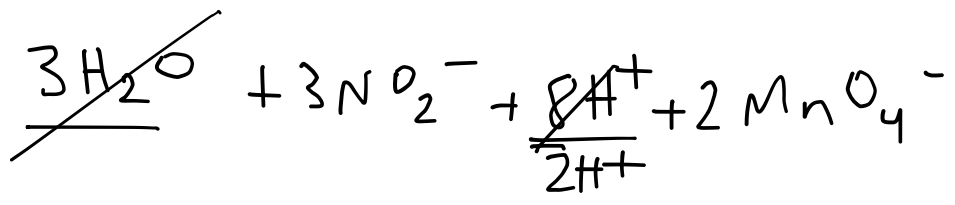
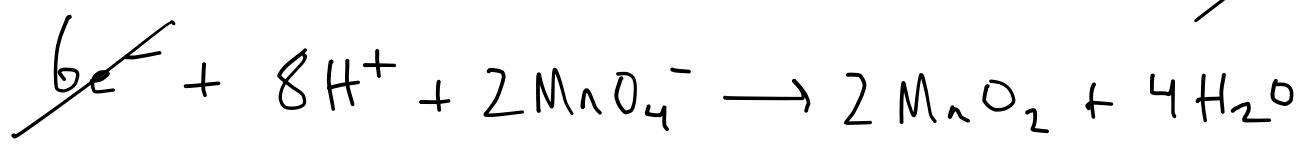
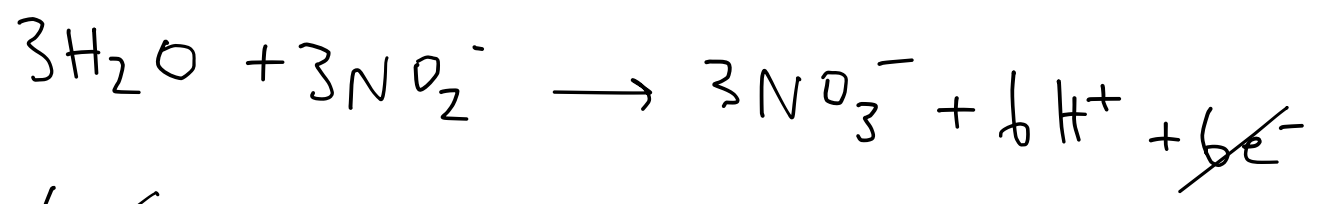
7)



double check:
 $+7 -2 \rightarrow +4 -2$
 $\text{MnO}_4^- \rightarrow \text{MnO}_2$
 $-4(-2) = -1 \quad -2(-2) = 0$
 $+7 \xrightarrow{+(-3)} +4$
 $=$
 gain $3e^-$ ✓



double check
 $+3 -2 \rightarrow +5 -2$
 $\text{NO}_2^- \rightarrow \text{NO}_3^-$
 $-2(-2) = -1 \quad -3(-2) = -1$
 $+3 \rightarrow +5$
 $-(-2)$
 lose $2e^-$ ✓



Acid-Base chemistry

was a lot of math + connecting that to concepts of solutions + movement of H^+ + OH^- .

Now: Redox chemistry

is assigning ^{ox.} numbers (+/- math) + connecting that to concepts related to batteries + rxns that involve the movement of e^- .