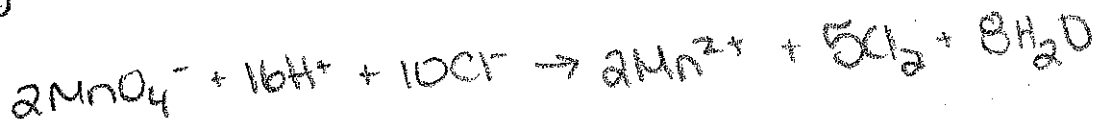
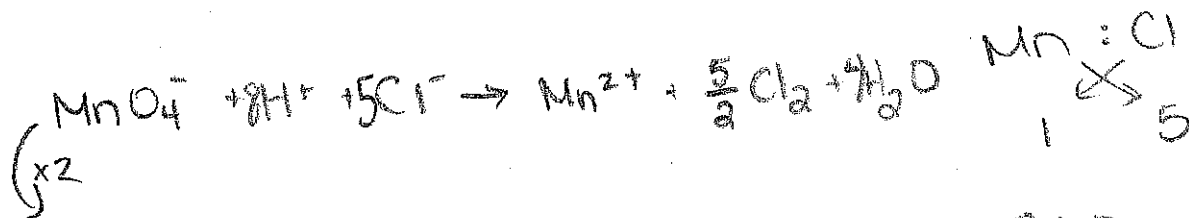
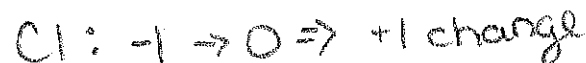
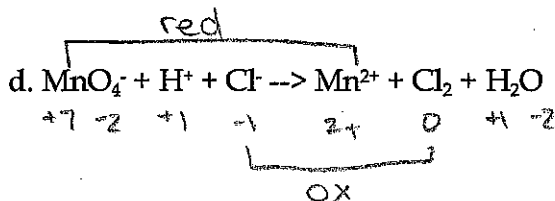
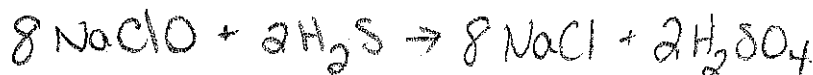
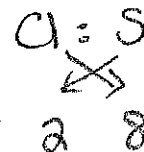
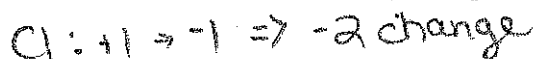
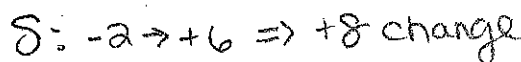
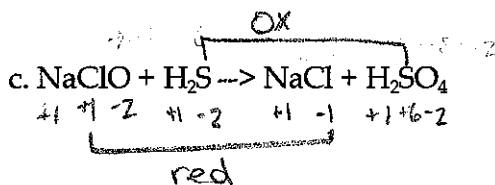
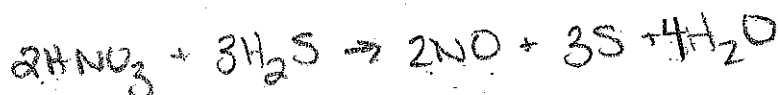
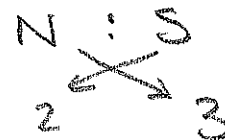
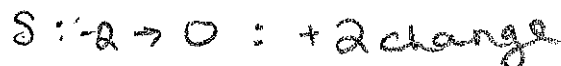
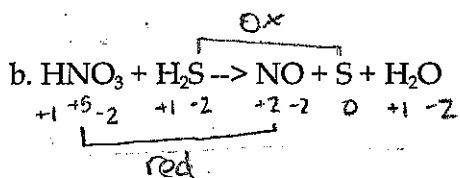
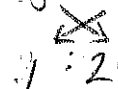
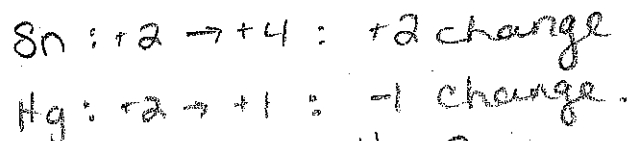
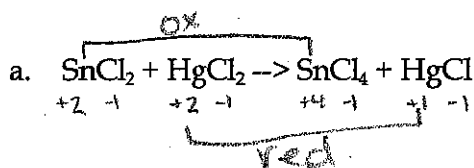
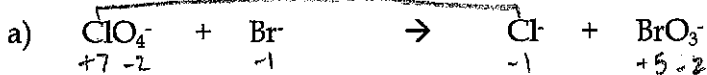


7.3 - Balancing Equations with Oxidation Numbers Assignment

1. Balance the following redox reactions using the oxidation number method.



2. Balance each of the following redox reactions in acidic solutions using both methods:



i) Oxidation Numbers:

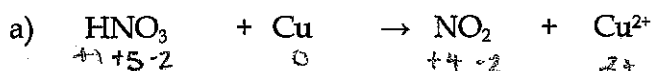
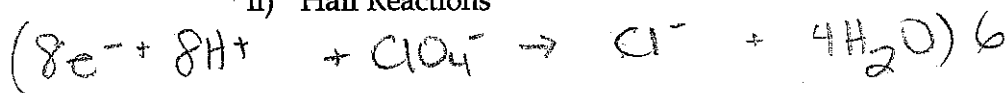
Cl: $+7 \rightarrow -1 \Rightarrow -8 \text{ change}$

Br: $-1 \rightarrow +5 \Rightarrow +6 \text{ change}$



Br : Cl
8 : 6

ii) Half Reactions

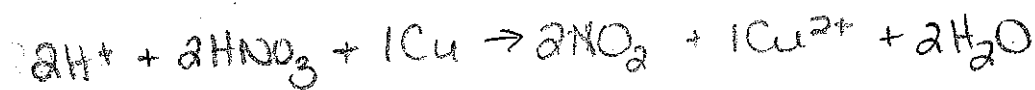


i) Oxidation Numbers:



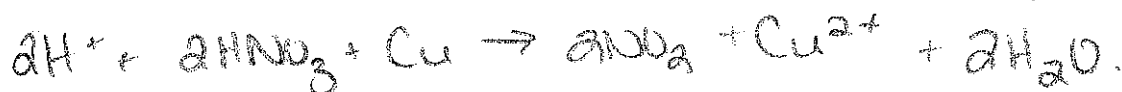
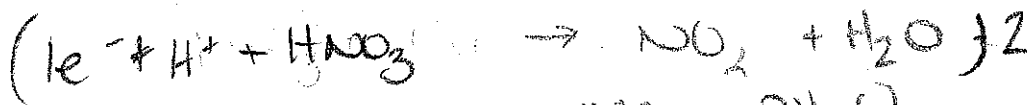
N: $+5 \rightarrow +4 : -1 \text{ change}$

Cu: $0 \rightarrow 2 : +2 \text{ change}$



Cu : N
1 2

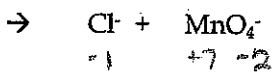
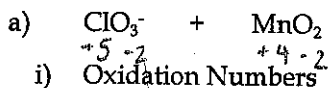
ii) Half Reactions



7.3 - Balancing Redox Reactions with Oxidation Numbers.notebook

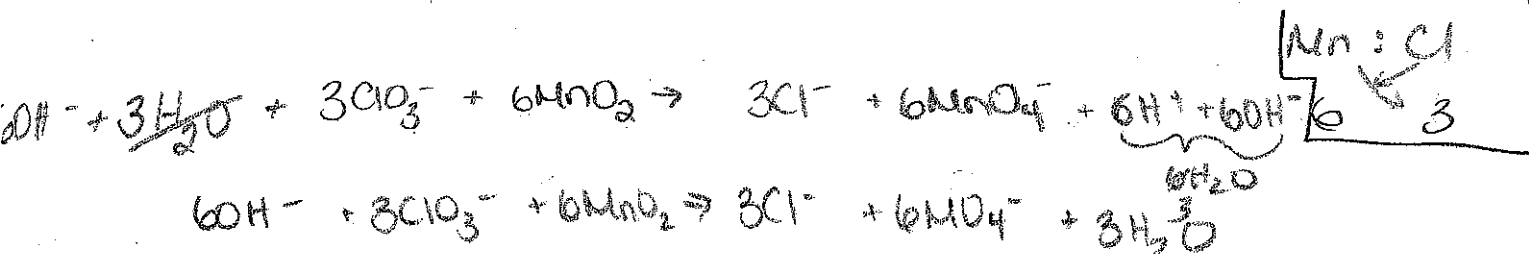
May 22, 2013

3. Balance the following redox reactions in basic solutions using both methods:

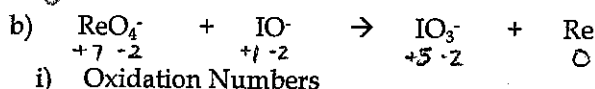
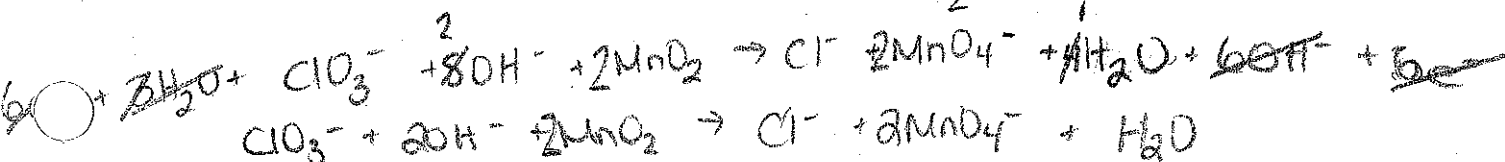
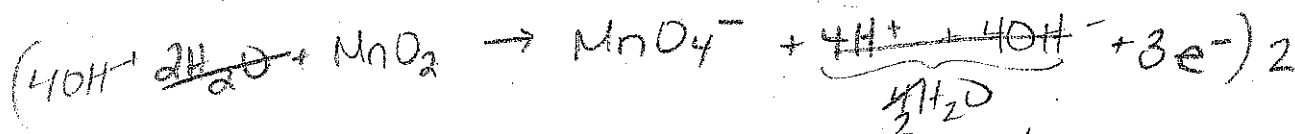
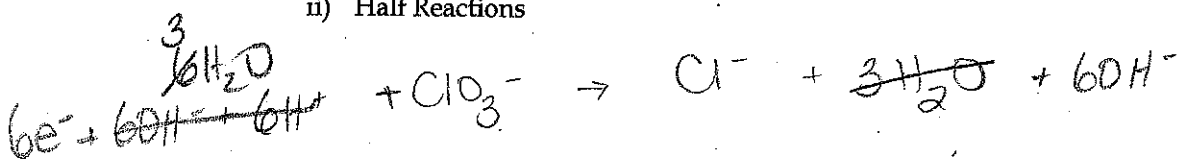


Mn: +4 → +7 → +3 change

Cl: +5 → -1 → -6 change



ii) Half Reactions



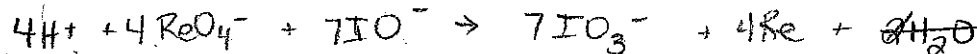
Re: +7 → 0 : -7 change

I: +1 → +5 : +4 change

Re: I

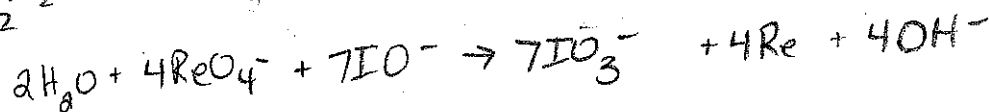
4 : 7

+4OH⁻



4H₂O

2



ii) Half Reactions

