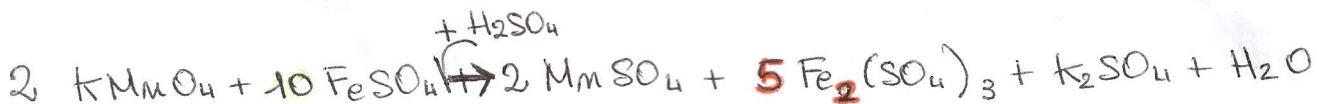
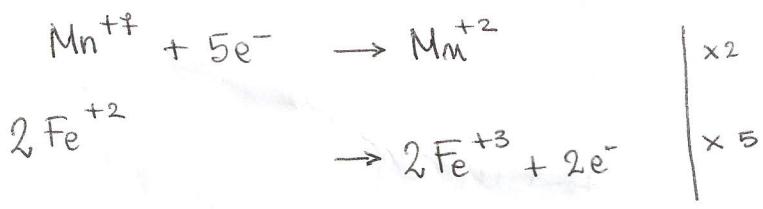
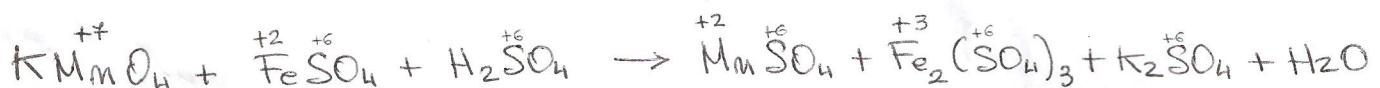
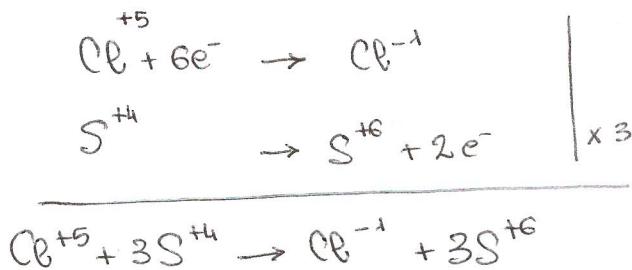


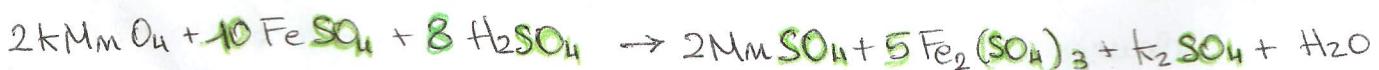
BILANCIO REDOX



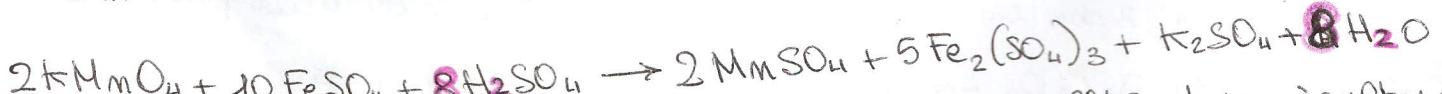
controllo il bilancio di massa: Mn e Fe sono sicuramente corretti perché erano coinvolti nello scambio di elettroni.

Controllo τ : me ho 2 a sinistra e 2 a destra \Rightarrow ok

controllo i gruppi "SO₄" : me ho 18 a destra; devo averne
oltrettanti a sinistra dove ce ne sono già 10 da FeSO₄. Quindi

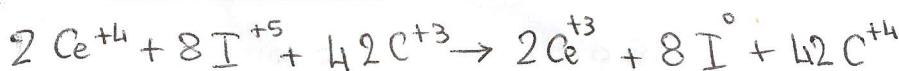
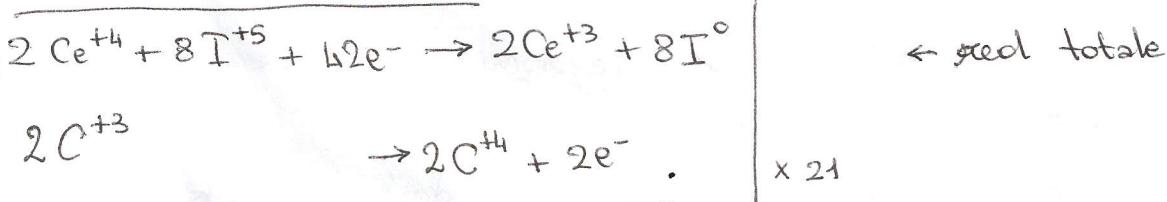
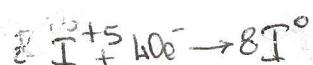
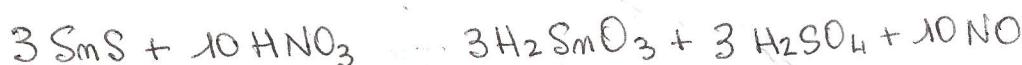
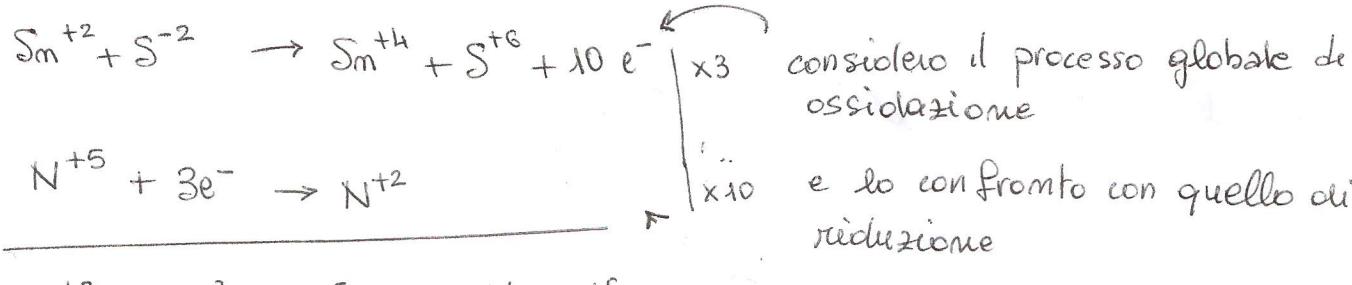
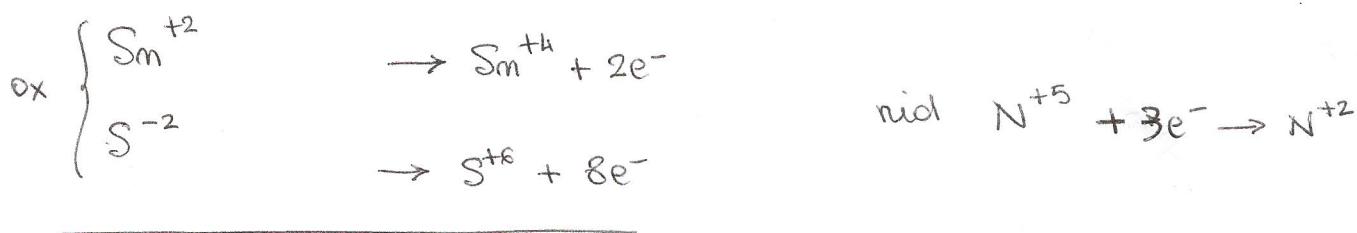
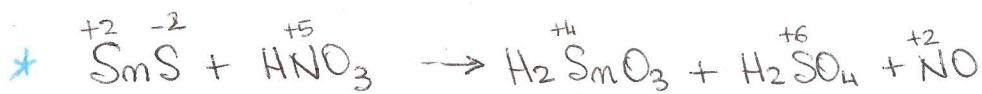


Controllo il bilancio di H:

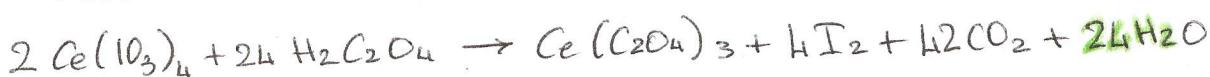
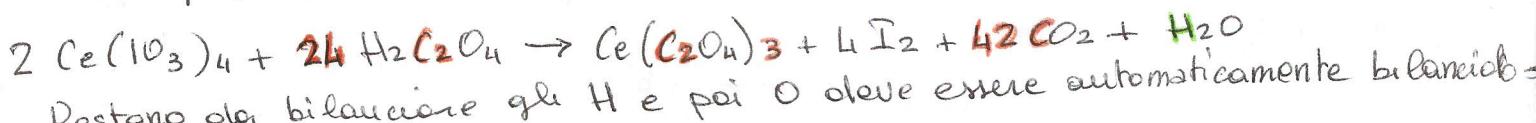


A questo punto, se ho fatto tutto bene, il bilancio dell'O deve risultare giusto. Escludendo quello nei gruppi "SO₄" che ho già "sistemato", ne ho 8 a sinistra (2KMnO_4) e 8 a destra ($8 \text{H}_2\text{O}$) \Rightarrow giusto

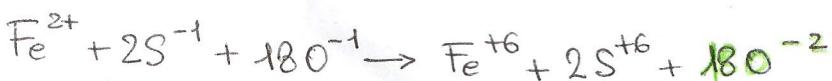
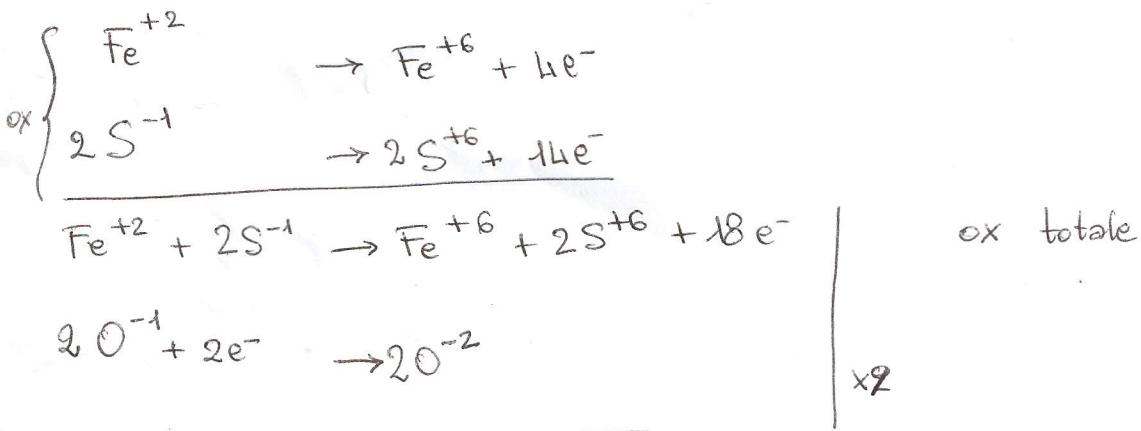
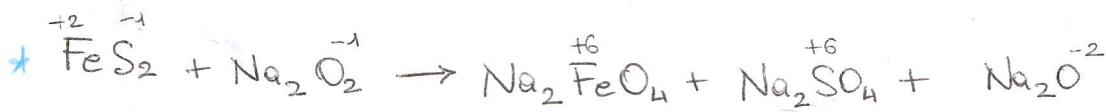
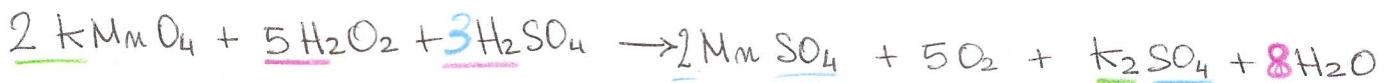
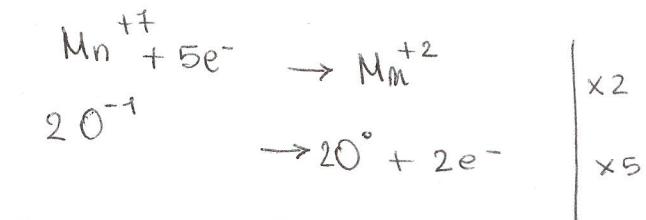
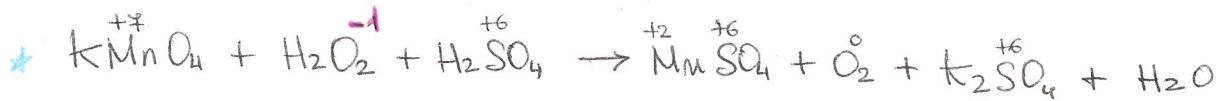
#BILANCIO REDOX



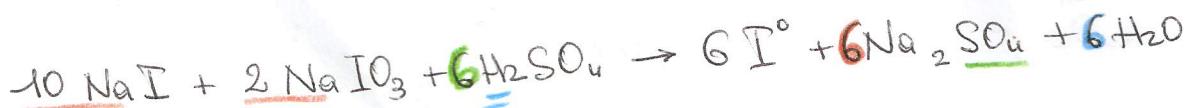
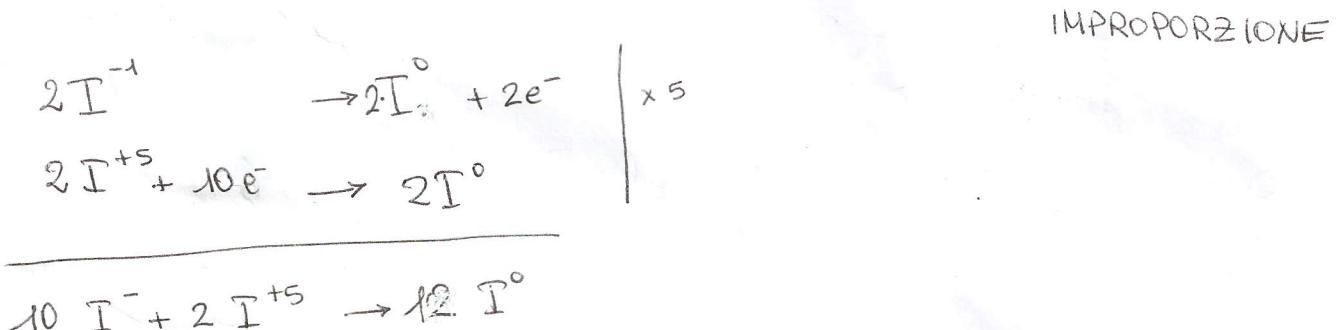
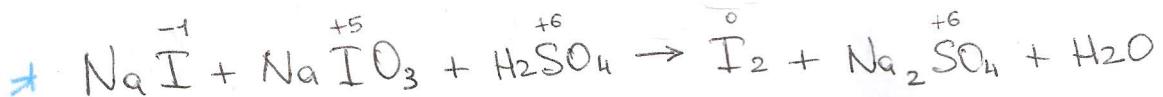
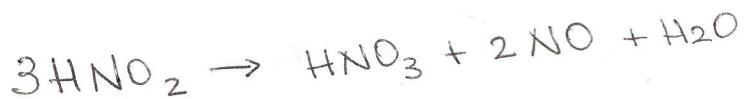
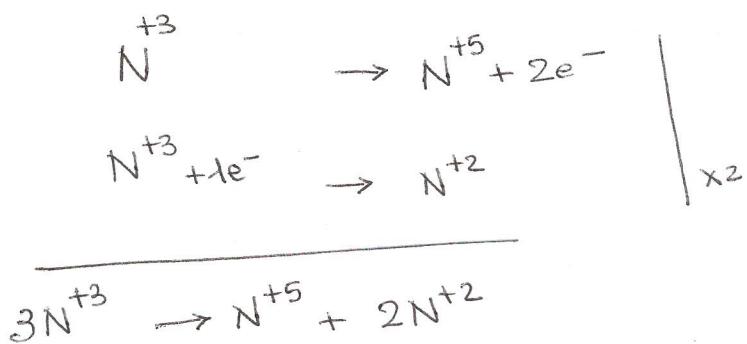
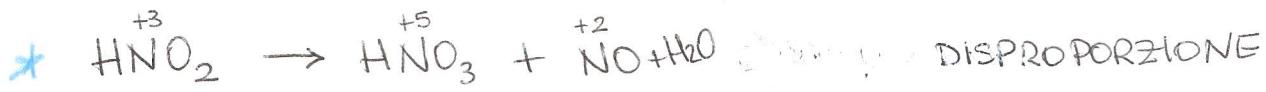
Controllo il bilancio di massa. Per C ho $42 + 2 \times 3$ a destra e solo 42 a sinistra \Rightarrow a sinistra ho bisogno di 21 $\text{H}_2\text{C}_2\text{O}_4$: 21 per la redox vera e propria + 3 che non scambiano elettroni (servono ad acidi picare) \Rightarrow



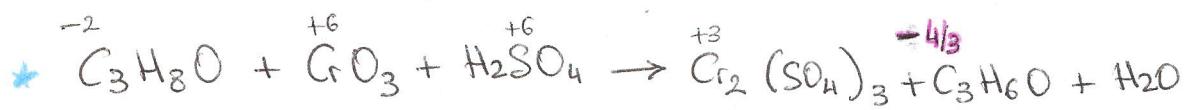
BILANCIO REDOX



Per "sistematico" i 18 O⁻² considero quelli che ho già determinato dai coeff di Fe e S e metto quelli che mancano nel composto di cui ancora non so nulla

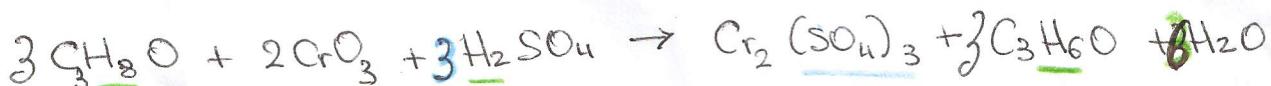
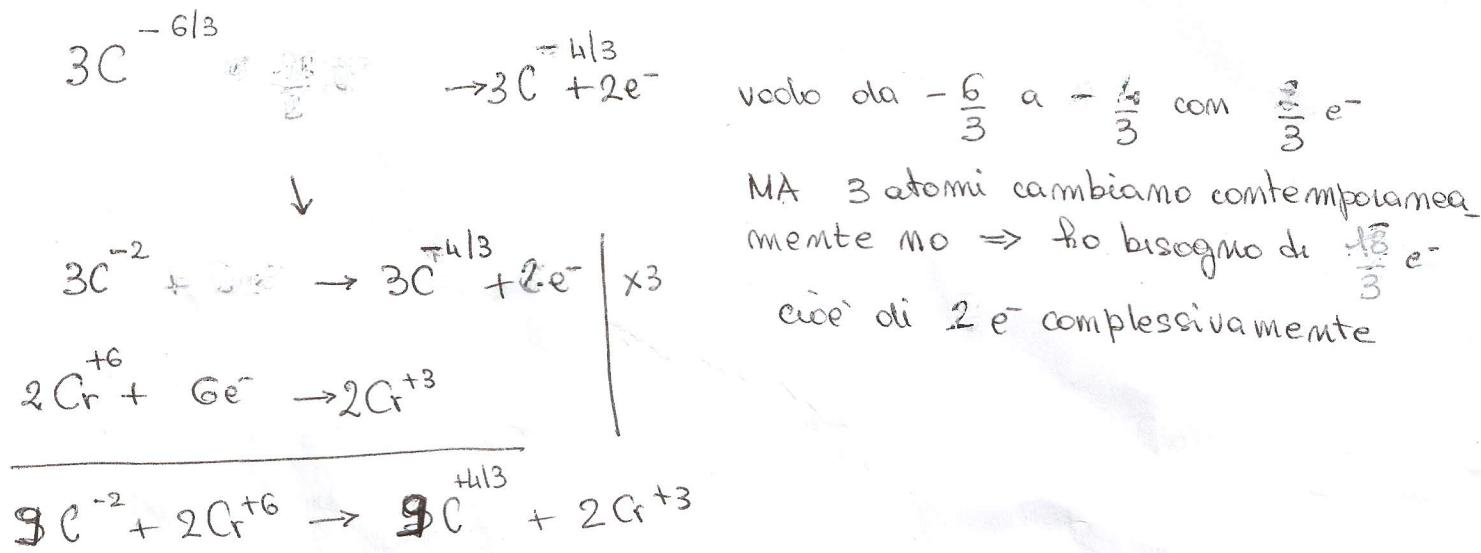


BILANCIO REDOX

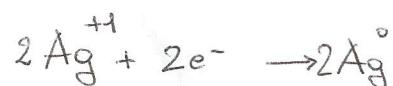


Niente panico! Il numero di ossidazione è solo un valore medio: nella realtà ogni atomo avrà un M.O. intero!

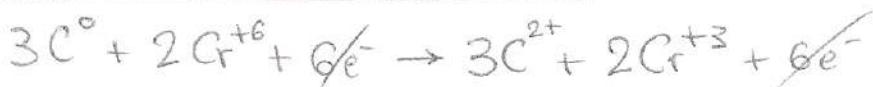
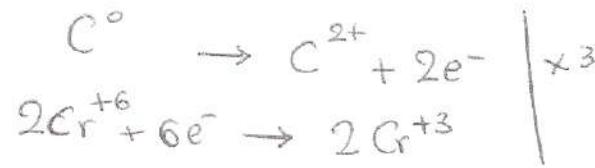
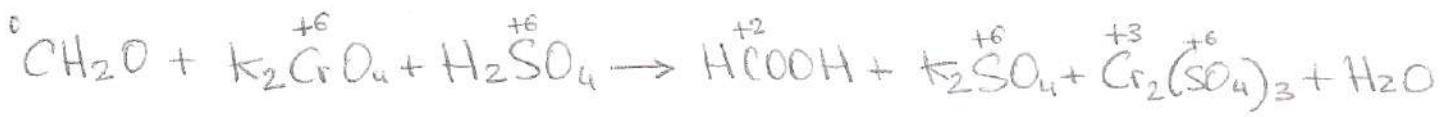
- Per facilitare i conti trasformiamo in frazionario il M.O. del C a sinistra: usiamo cioè $-6/3$ invece che -2



ok!

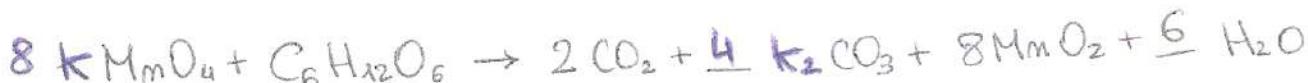
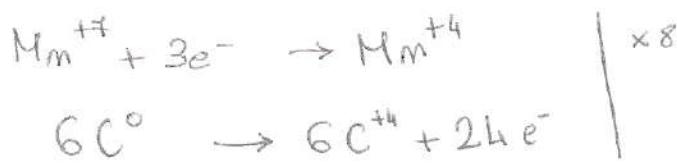


REDOX

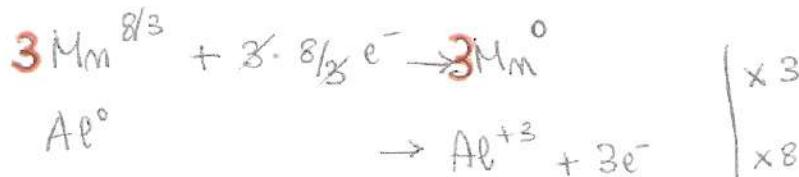


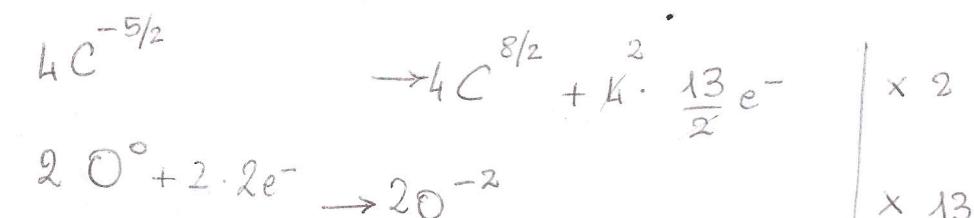
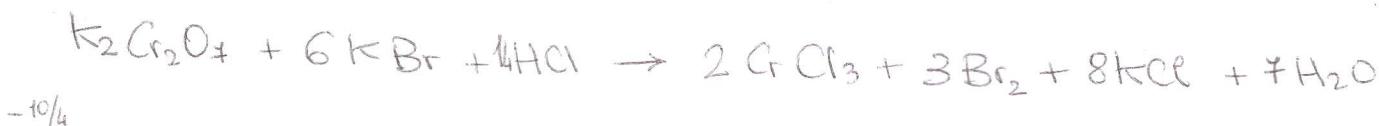
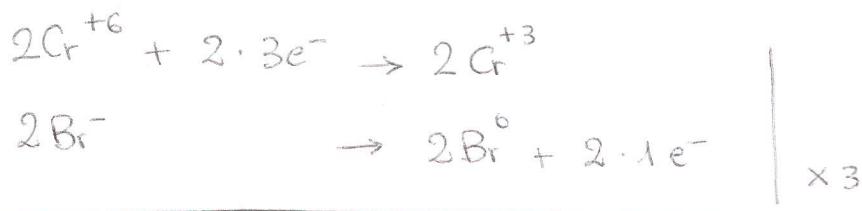
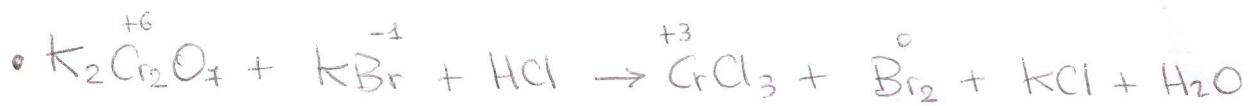
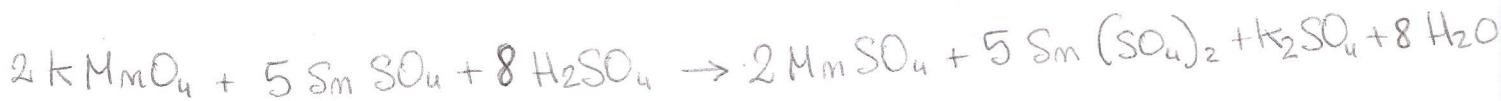
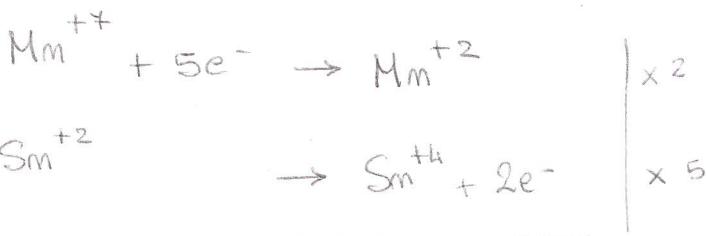
$$n^{\circ} \text{O} = 31$$

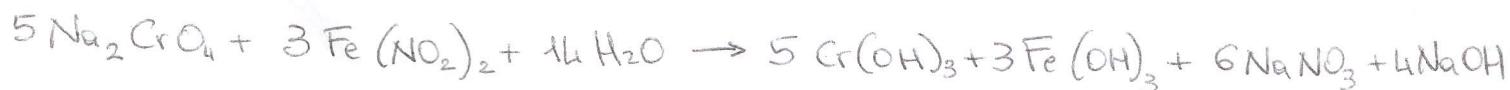
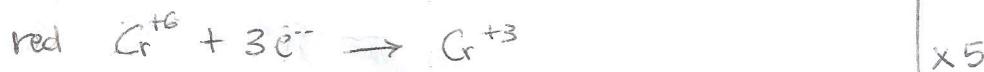
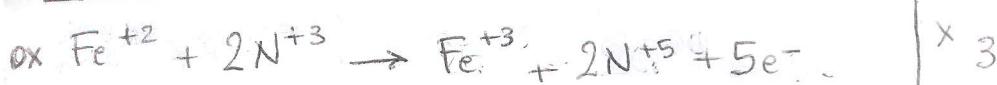
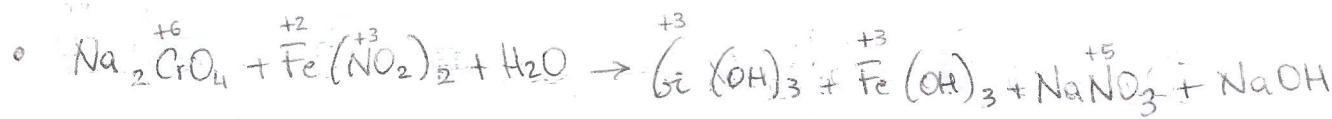
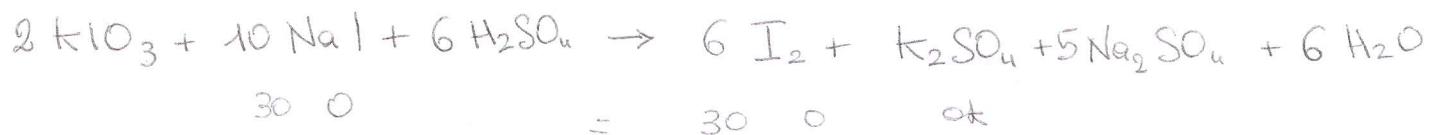
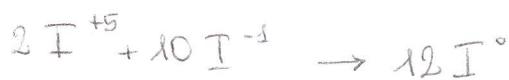
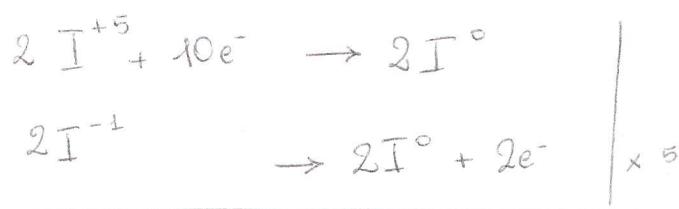
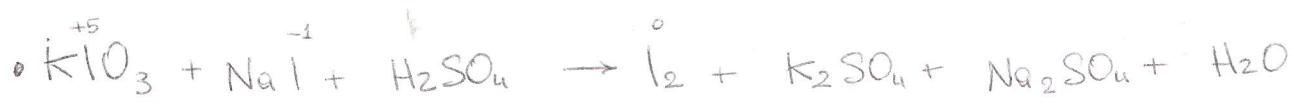
$$m^{\circ} \text{O} = 31$$

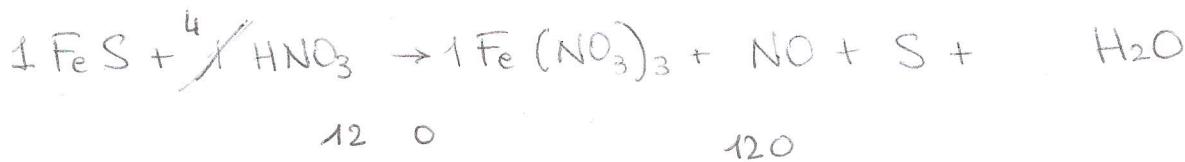
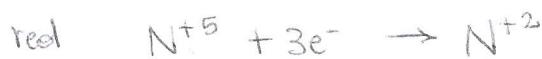
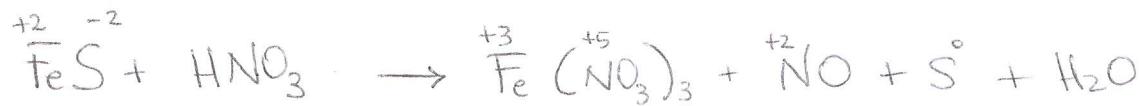
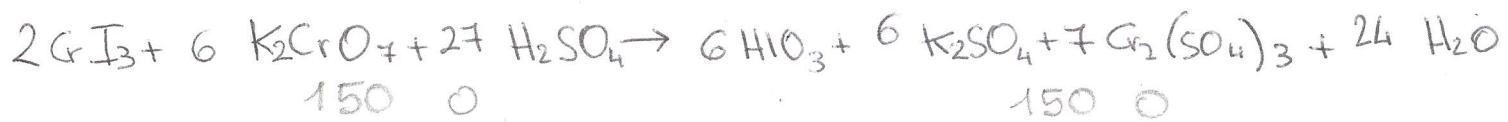
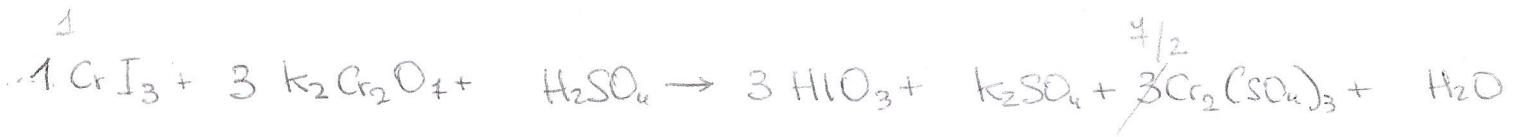
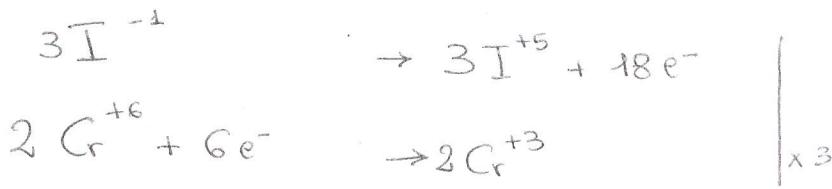


per decidere come assegnare
 i C^{+4} fra i due composti che
 li contengono mi aiuto con il coeff.
 che mi ottengo dal bilancio di massa

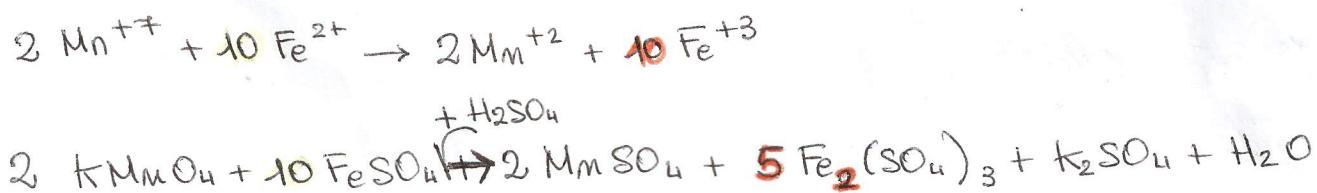
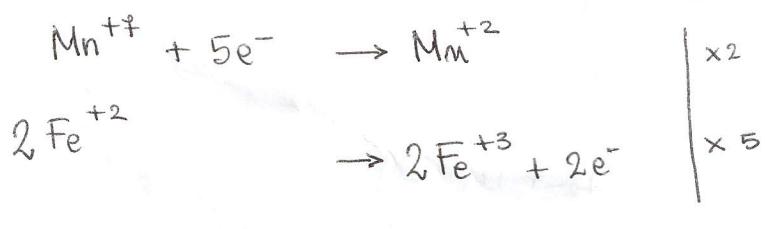
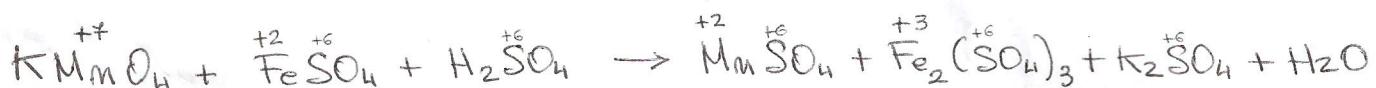
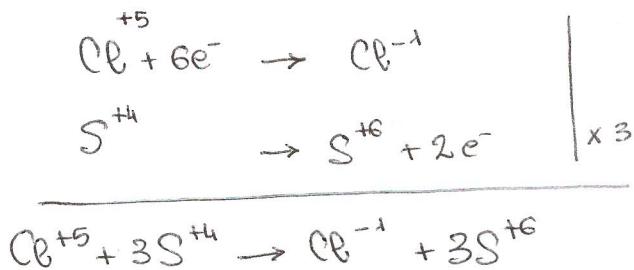
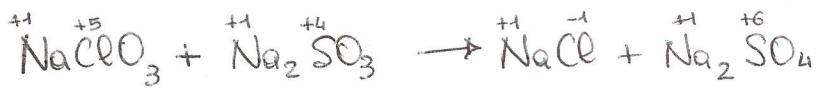
$$+8/3$$








BILANCIO REDOX



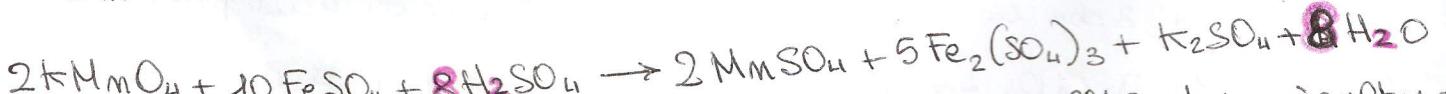
controllo il bilancio di ossigeno: Mn e Fe sono sicuramente corretti perché erano coinvolti nello scambio di elettroni.

Controllo K: me ho 2 a sinistra e 2 a destra \Rightarrow OK

Controllo i gruppi "SO₄": me ho 18 a destra; devo avere altrettanti a sinistra dove ce ne sono già 10 da FeSO₄. Quindi

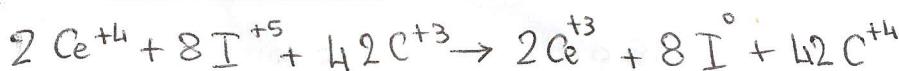
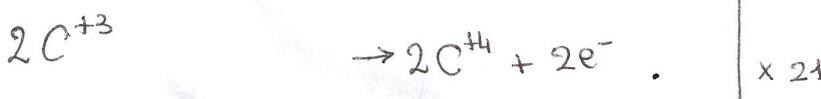
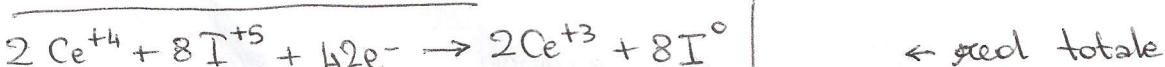
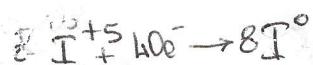
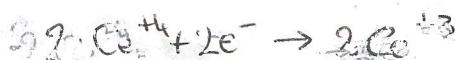
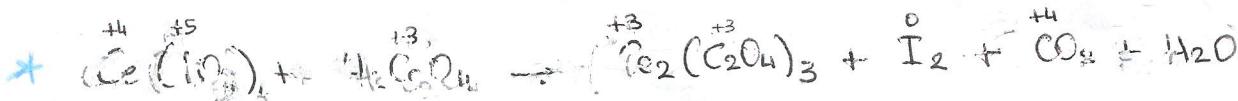
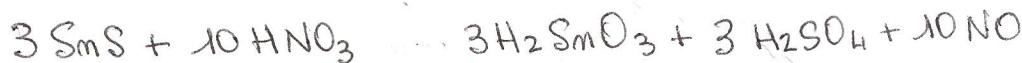
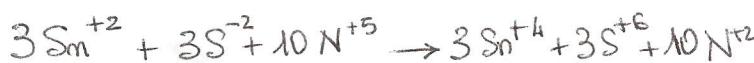
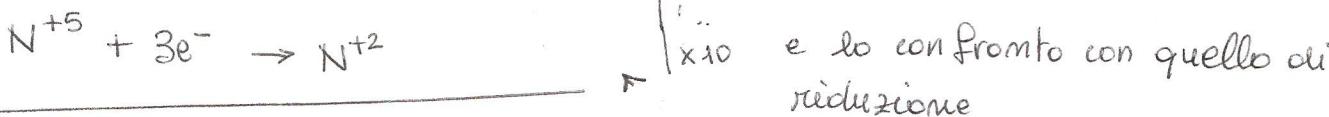
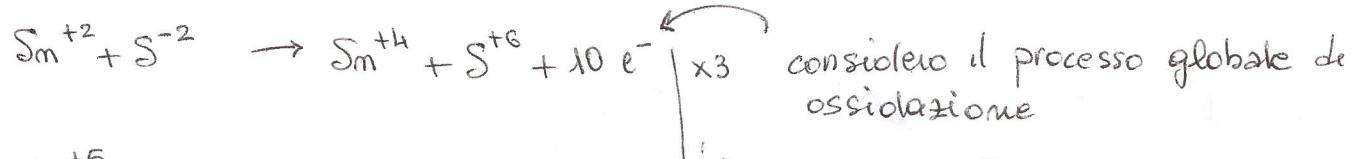
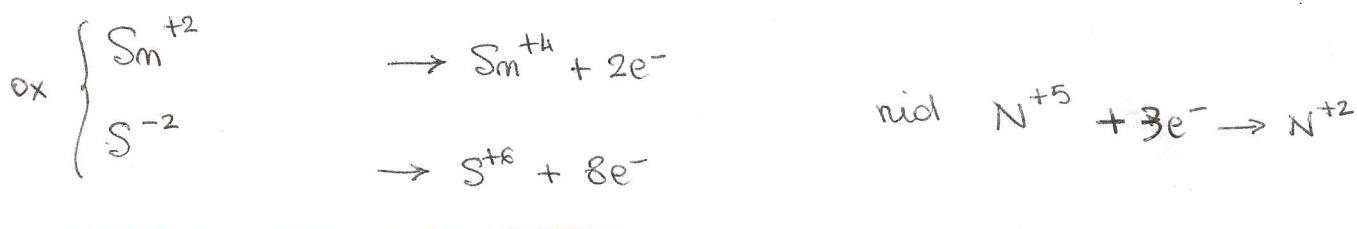
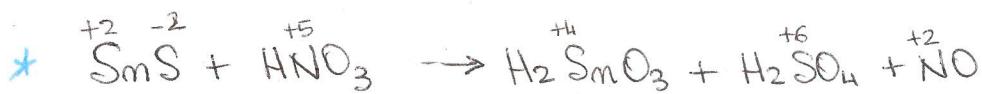


Controllo il bilancio di H:

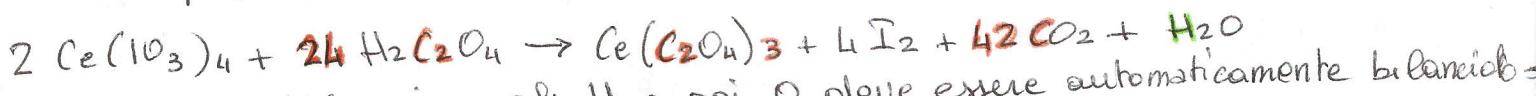


A questo punto, se ho fatto tutto bene, il bilancio dell'O deve risultare giusto. Escludendo quello nei gruppi "SO₄" che ho già "sistemato", ne ho 8 a sinistra (2KMnO_4) e 8 a destra ($8 \text{H}_2\text{O}$) \Rightarrow giusto

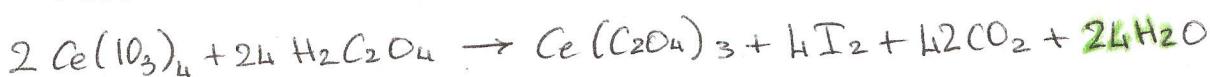
#BILANCIO REDOX



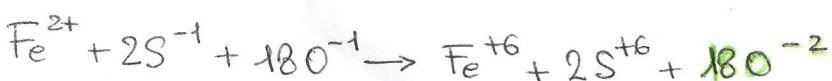
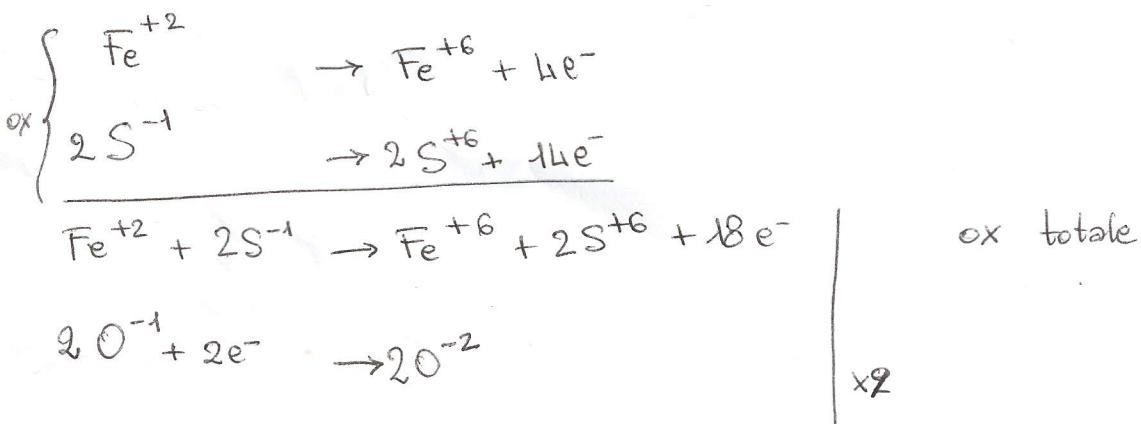
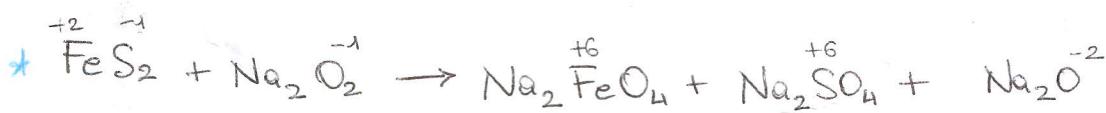
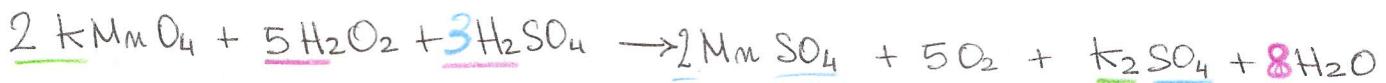
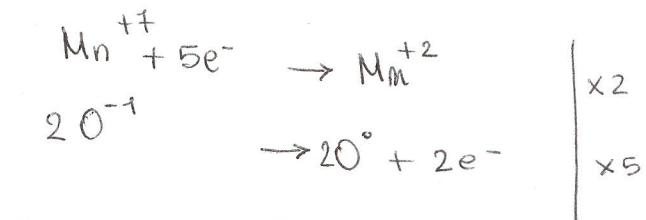
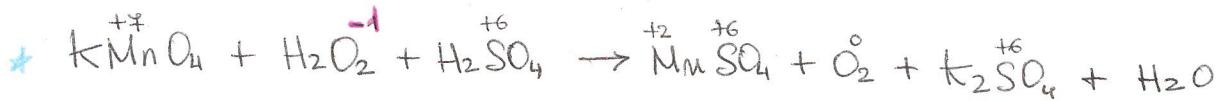
Controllo il bilancio di massa. Per C ho $42 + 2 \times 3$ a destra e solo 12 a sinistra \Rightarrow a sinistra ho bisogno di 21 $\text{H}_2\text{C}_2\text{O}_4$: 21 per la redox vera e propria + 3 che non scambiano elettroni (servono ad acidi picare) \Rightarrow



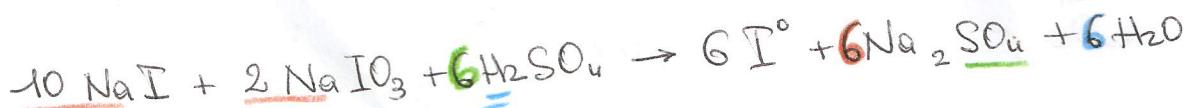
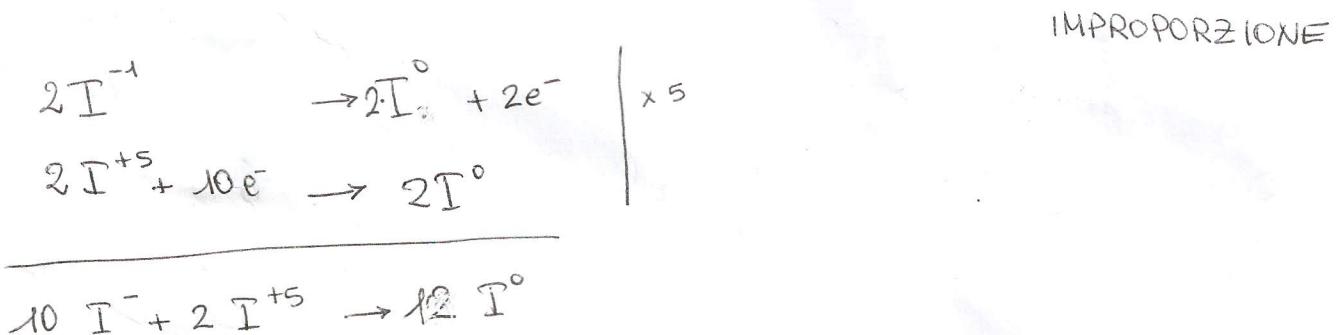
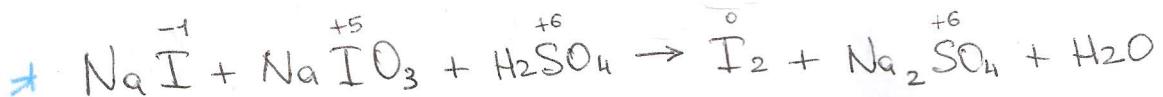
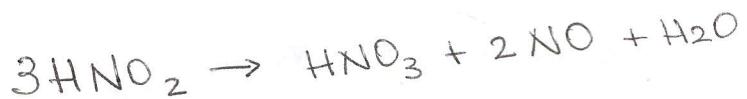
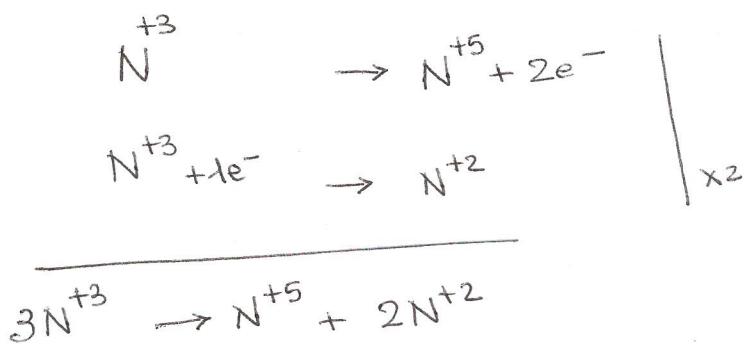
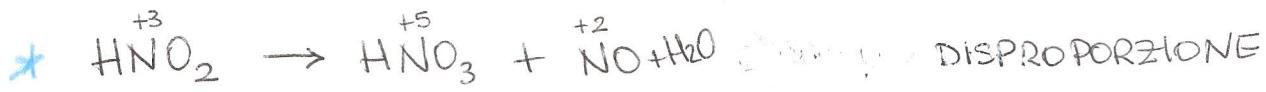
Restano ora bilanciare gli H e poi O deve essere automaticamente bilanciato.



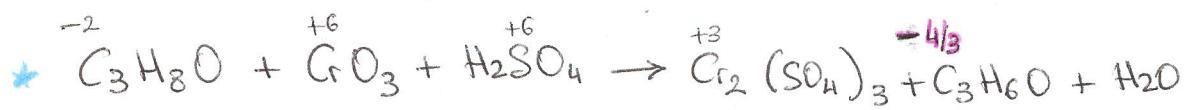
BILANCIO REDOX



Per "sistematico" i 18 O⁻² considero quelli che ho già determinato dai coeff di Fe e S e metto quelli che mancano nel composto di cui ancora non so nulla

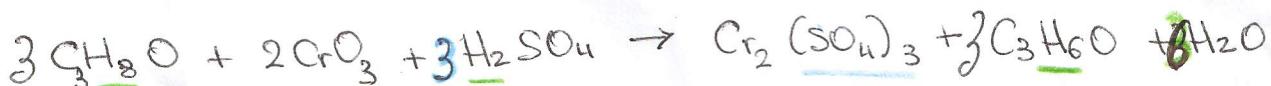
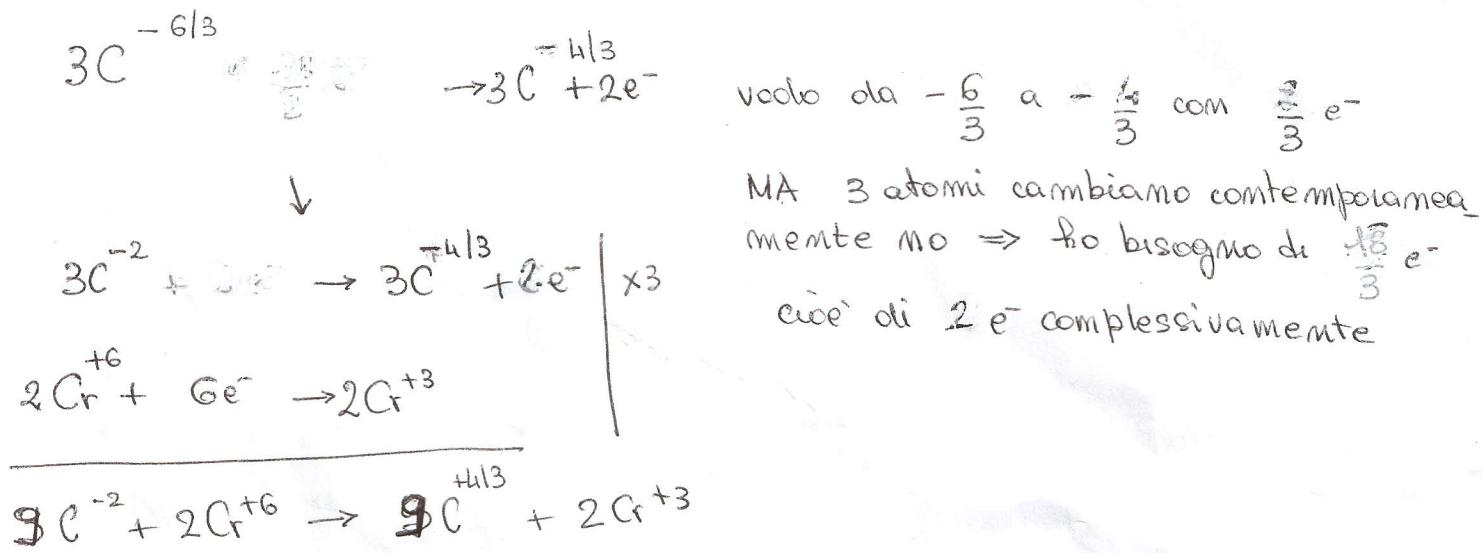


BILANCIO REDOX



Niente panico! Il numero di ossidazione è solo un valore medio: nella realtà ogni atomo avrà un M.O. intero!

- Per facilitare i conti trasformiamo in frazionario il M.O. del C a sinistra: usiamo cioè $-6/3$ invece che -2



ok!

