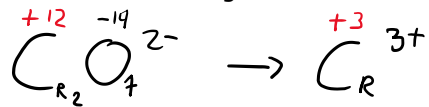
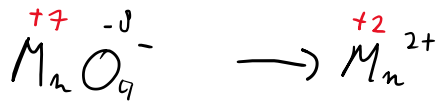


### Opgave 1

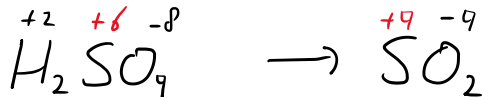
a Geef de oxidatiegetallen van Cr in  $\rightarrow \text{Cr}_2\text{O}_7^{2-} / \text{Cr}^{3+}$



b Geef de oxidatiegetallen van Mn in  $\rightarrow \text{MnO}_4^- / \text{Mn}^{2+}$



c Geef de oxidatiegetallen van S in  $\rightarrow \text{H}_2\text{SO}_4 / \text{SO}_2$



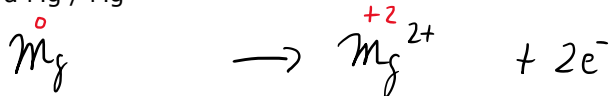
d Geef de oxidatiegetallen van S in  $\rightarrow \text{S}_2\text{O}_8^{2-} / \text{SO}_4^{2-}$



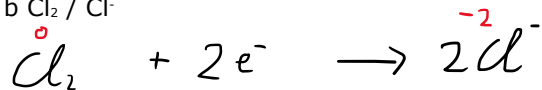
### Opgave 2

Maak de volgende halfreacties kloppend:

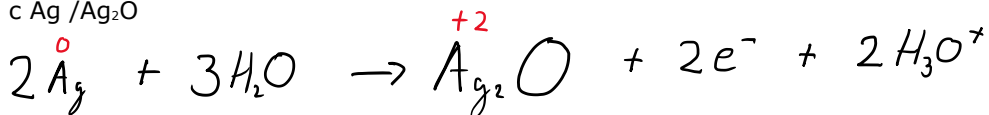
a Mg /  $\text{Mg}^{2+}$



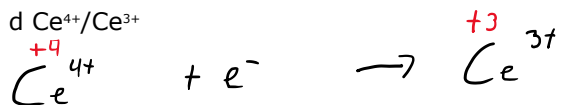
b  $\text{Cl}_2$  /  $\text{Cl}^-$



c Ag /  $\text{Ag}_2\text{O}$



d  $\text{Ce}^{4+}$  /  $\text{Ce}^{3+}$



### Opdracht 3

Geef van alle halfreacties uit opgave 2 aan of het om een oxidatie of reductie gaat.

a = oxidatie

b = reductie

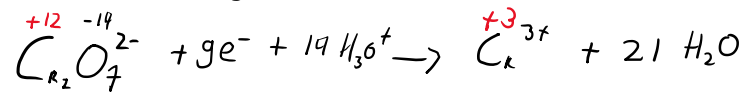
c = oxidatie

d = reductie

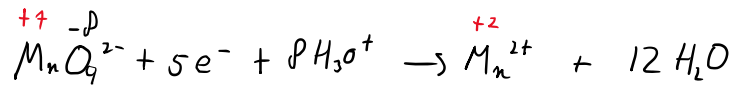
#### Opgave 4

Maak van opgave 1 de volledige halfreactie kloppend.

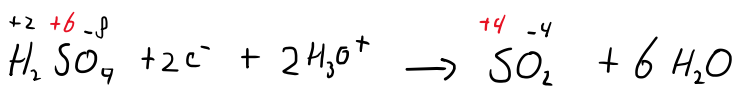
a Geef de oxidatiegetallen van Cr in  $\rightarrow \text{Cr}_2\text{O}_7^{2-} / \text{Cr}^{3+}$



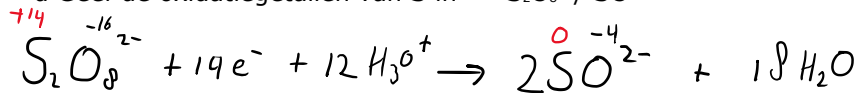
b Geef de oxidatiegetallen van Mn in  $\rightarrow \text{MnO}_4^- / \text{Mn}^{2+}$



c Geef de oxidatiegetallen van S in  $\rightarrow \text{H}_2\text{SO}_4 / \text{SO}_2$



d Geef de oxidatiegetallen van S in  $\rightarrow \text{S}_2\text{O}_8^{2-} / \text{SO}_4^{2-}$



#### Opgave 5

Geef het oxidatie getal C in  $(\text{COOH})_2$

