

Équilibrer une demi-équation d'oxydoréduction

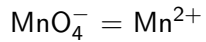
Équilibrer la réaction à partir des deux 1/2 équations

1S / TS

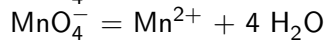
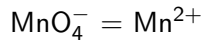
Méthode

- on équilibre les éléments chimiques principaux
- on équilibre les O avec H_2O
- on équilibre les H avec des H^+
- on équilibre la charge avec des e^-

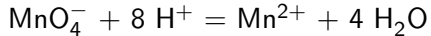
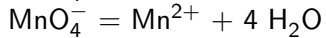
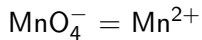
Couple $\text{MnO}_4^- / \text{Mn}^{2+}$



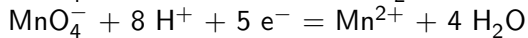
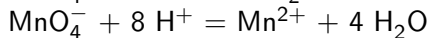
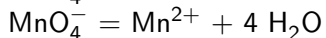
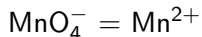
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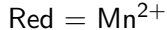
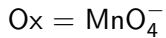
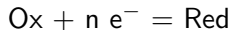
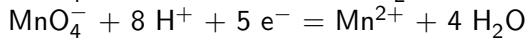
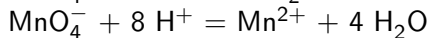
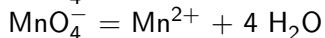
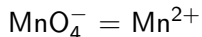
Couple $\text{MnO}_4^- / \text{Mn}^{2+}$



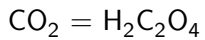
Couple $\text{MnO}_4^- / \text{Mn}^{2+}$



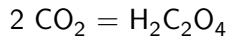
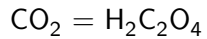
Couple $\text{MnO}_4^- / \text{Mn}^{2+}$



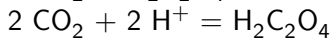
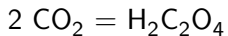
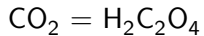
couple $\text{CO}_2 / \text{H}_2\text{C}_2\text{O}_4$



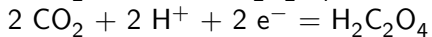
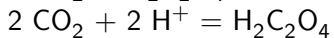
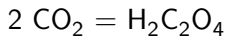
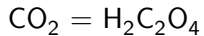
couple CO_2 / $\text{H}_2\text{C}_2\text{O}_4$



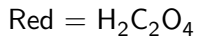
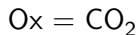
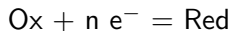
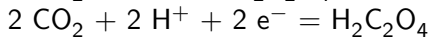
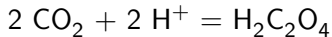
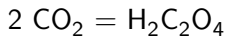
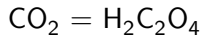
couple $\text{CO}_2 / \text{H}_2\text{C}_2\text{O}_4$



couple $\text{CO}_2 / \text{H}_2\text{C}_2\text{O}_4$

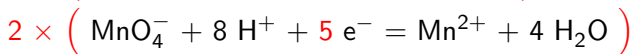


couple $\text{CO}_2 / \text{H}_2\text{C}_2\text{O}_4$



Réaction chimique

On met en présence les ions permanganate MnO_4^- et l'acide oxalique $\text{H}_2\text{C}_2\text{O}_4$:



Tous les électrons cédés par l'oxydant doivent être gagnés par le réducteur :

