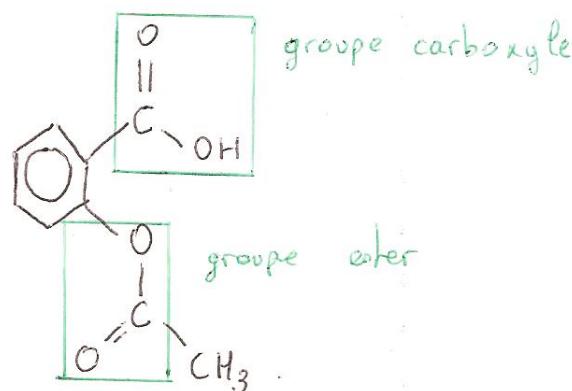


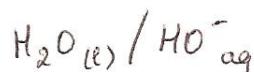
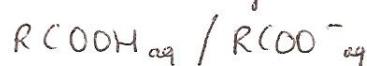
Dosage d'un comprimé d'aspirine

I - Etude théorique

1. a.

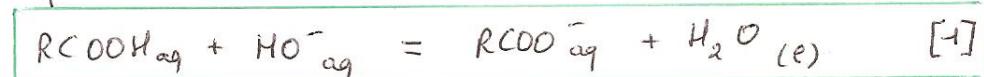


b. Couples mis en jeu :



Réaction entre RCOOH_{aq} et $\text{HO}^{-}_{\text{aq}}$:

D'où l'équation de la réaction :



par définition :

$$K_a = \frac{[\text{RCOO}^{-}_{\text{aq}}]_{\text{eq}}}{[\text{RCOOH}_{\text{aq}}]_{\text{eq}} \times [\text{HO}^{-}_{\text{aq}}]_{\text{eq}}}$$

$$K_R = \frac{[\text{RCOO}^{-}_{\text{aq}}]_{\text{eq}}}{[\text{RCOOH}_{\text{aq}}]_{\text{eq}} \times [\text{HO}^{-}_{\text{aq}}]_{\text{eq}}} \times \frac{[\text{H}_3\text{O}^{+}_{\text{aq}}]}{[\text{H}_3\text{O}^{+}_{\text{aq}}]}$$

$$K_R = \frac{K_a}{K_e} = \frac{10^{-pK_a}}{10^{-pK_e}} \quad \boxed{= 10^{-pK_a + pK_e}}$$