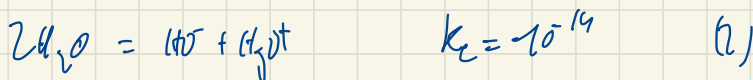
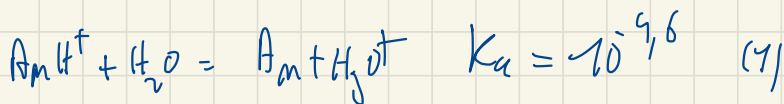
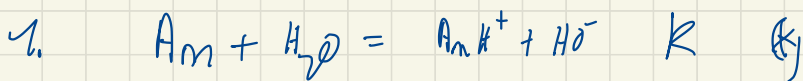



B2018

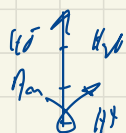
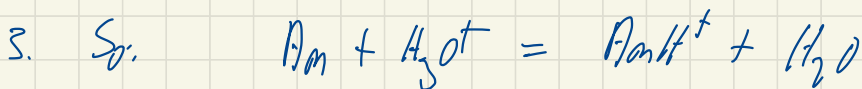


(3) - (2) $\rightarrow$ $K = 10^{-14} \cdot 10^{9,6}$
 $= 10^{-3,4} = 4 \cdot 10^{-10}$

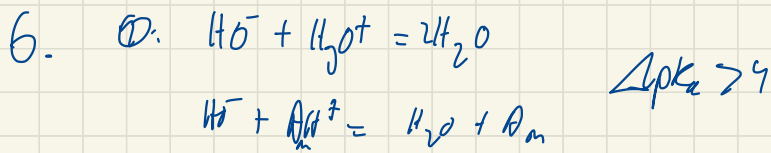
2. toxique, cancérogène, dépressant, corrosif.

3. L'amiline est corrosive, on peut essayer de porter des gants, lunettes et une blouse.

4. Electrode de verre combinée
 ou bien électrode de verre et ECS



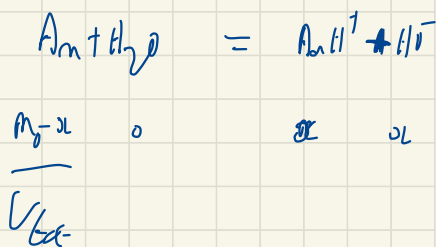
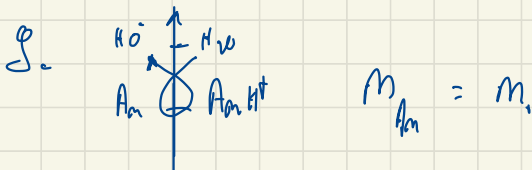
$pH = pK_a + \lg \left(\frac{A^-}{A_mH^+} \right)$ A_m quasi constant
 $S: A_mH^+, A_mO^+, H_2O$



7. $m_{\text{H}^-} = m_{\text{H}_3\text{O}^+} + m_{\text{AmH}^+} = m_{\text{H}_3\text{O}^+}^{\text{ini}}$

donc $V_1 = 20 \text{ mL}$

8. $m_{\text{Am}} = V_{2 \rightarrow}^{\text{H}_2\text{O}} \cdot C_{\text{H}_2\text{O}}$
 $= 13,8 \cdot 2,5 \cdot 10^{-1} \cdot 10^{-3}$

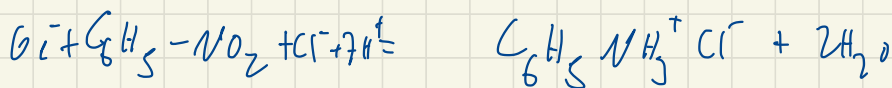
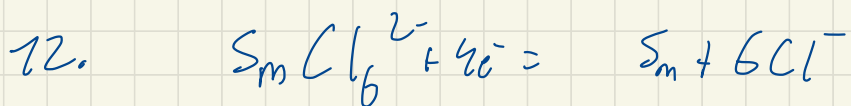


$K^a = 10^{-9,9} = \frac{x^2}{m_1 - x}$
 $\approx \frac{x^2}{m_1 / K^a}$

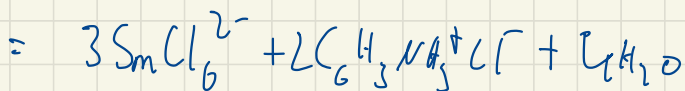
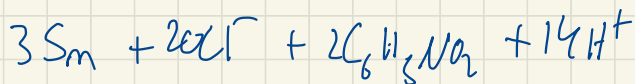
$x = \sqrt{10^{-9,9} \cdot \frac{m_1}{V_{\text{tot}}}}$

10. Le pKa de leph est bien compris dans
les variations de pKa du second virage,
 $3,2 \in [0,4; 10]$.

11. Suivi conductimétrique



Donc



$$13. \quad m_{\text{HCl}} = 0,37 \quad (220, 1,2)$$

$$m_{\text{HCl}} = \frac{m_{\text{HCl}}}{m_{\text{HCl}}}$$

16.

