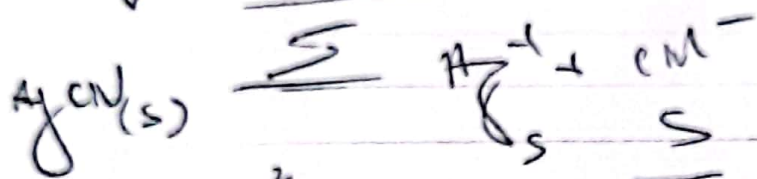


المسألة 10  
 حساب  $K_s$  لـ  $AgCN$



$$K_s = S^2 \Rightarrow S = \sqrt{K_s} = \sqrt{2 \times 10^{-16}} = 1.41 \times 10^{-8} \text{ mol/L}$$

02  
 = pH = 8

$$S = \sqrt{K_s \left(1 + \frac{10^{-pH}}{K_a}\right)} \Rightarrow pH = -\log \left( \left( \frac{S^2}{K_s} - 1 \right) \times K_a \right)$$

$$pH = -\log \left[ \left( \frac{(7.74 \times 10^{-3})^2}{2 \times 10^{-16}} - 1 \right) \times 6 \times 10^{-10} \right]$$

$$= 2$$

02