

144. U 200cm^3 rastvora KOH (disocijacija potpuna) nalazi se $1,2 \cdot 10^{20}$ OH^- jona.
Izračunati PH vrednost rastvora.

$$\begin{array}{l} 1,2 \cdot 10^{20} \text{ jonaOH}^- \rightarrow 200\text{cm}^3 \text{ rastvora} \\ x \text{ jonaOH}^- \rightarrow 1000\text{cm}^3 \text{ rastvora} \end{array}$$

$$x = 6 \cdot 10^{20} \text{ jonaOH}^-$$

$$\begin{array}{l} 1 \text{ molOH}^- \rightarrow 6 \cdot 10^{23} \text{ jonaOH}^- \\ x \text{ molOH}^- \rightarrow 6 \cdot 10^{20} \text{ jonaOH}^- \end{array}$$

$$x = 1 \cdot 10^{-3} \text{ molOH}^-$$

$$\begin{array}{l} 1 \cdot 10^{-3} \text{ molOH}^- \rightarrow 1000\text{cm}^3 \\ 1 \cdot 10^{-3} \text{ molOH}^- \rightarrow 1\text{dm}^3 \end{array}$$

$$[\text{OH}^-] = 1 \cdot 10^{-3} \frac{\text{mol}}{\text{dm}^3} \quad [\text{H}^+] = 1 \cdot 10^{-11} \frac{\text{mol}}{\text{dm}^3}$$

$$PH = -\log[\text{H}^+]$$

$$PH = -\log 10^{-11}$$

$$PH = 11$$