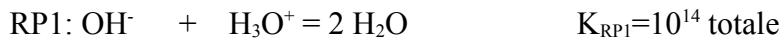
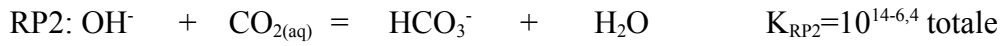


EX4:



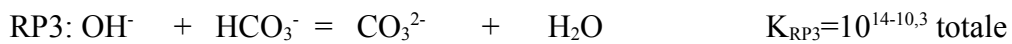
$$EI \frac{40 \times 1}{106} \quad \frac{36 \times 0,5}{106}$$

$$EF \frac{22 \times 1}{106} \quad 0$$



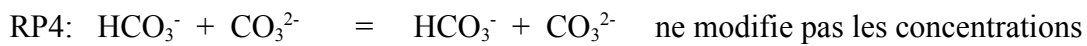
$$EI \frac{22}{106} \quad \frac{30 \times 0,5}{106} \quad 0$$

$$EF \frac{7}{106} \quad 0 \quad \frac{15}{106}$$



$$EI \frac{7}{106} \quad \frac{15}{106} \quad 0$$

$$EF \quad 0 \quad \frac{8}{106} \quad \frac{7}{106}$$



On peut proposer $\text{pH} = \text{p}K_2 + \log(7/8) = 10,2$

à condition que $[\text{HCO}_3^-][\text{CO}_3^{2-}] \gg [\text{OH}^-][\text{H}_3\text{O}^+][\text{CO}_{2(\text{aq})}]$ ce qui est vérifié par les valeurs calculées et le diagramme de prédominance.

D'où le pouvoir tampon: $t = \ln 10 \times \frac{7}{15} \times \frac{8}{15} \times \frac{15}{106} = 8,1 \cdot 10^{-2} \text{ mol/L}$