

Answers to problems in page 560

Answers to Practice Problem E

1. $[\text{H}_3\text{O}^+] = 1.62 \times 10^{-3} \text{ M}$
2. $K_a = 3.4 \times 10^{-8}$
3. $K_a = 6.4 \times 10^{-5}$
4. $[\text{HCOO}^-] = 3.9 \times 10^{-3} \text{ M}$

Homework

GENERAL

1. What is $[\text{H}_3\text{O}^+]$ in a 0.250 M solution of benzoic acid, $\text{C}_6\text{H}_5\text{COOH}$? **Ans. $4.02 \times 10^{-3} \text{ M}$**
2. In a 0.025 M solution of formic acid, the hydronium ion concentration is $2.03 \times 10^{-3} \text{ M}$. Calculate the K_a for HCOOH .
Ans. $K_a = 1.65 \times 10^{-4}$
3. $[\text{H}_3\text{O}^+]$ in a 1.20 M solution of dibromoacetic acid is 0.182 M. Calculate K_a for this acid.
Ans. $K_a = 2.76 \times 10^{-2}$

LS Logical