Calculate the pH to the nearest 0.01 unit of a solution which is 0.015 M in CH_3COOH and 0.10 M in $NaCH_3COO$. The K_a for CH_3COOH is 1.8×10^{-5}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 5.56

Calculate the pH to the nearest 0.01 unit of a solution which is 0.025 M in HCOOH and 0.15 M in NaHCOO. The K_a for HCOOH is 1.76×10^{-4}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 4.53

Calculate the pH to the nearest 0.01 unit of a solution which is 0.050 M in HNO_2 and 0.10 M in $NaNO_2$. The K_a for HNO_2 is 4.0×10^{-4}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 3.70

Calculate the pH to the nearest 0.01 unit of a solution which is 0.35 M in $HClO_2$ and 0.045 M in $NaClO_2$. The K_a for $HClO_2$ is 1.5×10^{-4}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 2.93

Calculate the pH to the nearest 0.01 unit of a solution which is 0.0025 M in C_6H_5COOH and 0.035 M in NaC_6H_5COO. The K_a for C_6H_5COOH is 6.30×10^{-5}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 5.35

Calculate the pH to the nearest 0.01 unit of a solution which is 0.075 M in HCOOH and 0.15 M in NaHCOO. The K_a for HCOOH is 1.8×10^{-4}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 4.05

Calculate the pH to the nearest 0.01 unit of a solution which is 0.0085 M in CH_3COOH and 0.090 M in $NaCH_3COO$. The K_a for CH_3COOH is 1.8×10^{-5}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 5.77

Calculate the pH to the nearest 0.01 unit of a solution which is 0.15 M in HIO_2 and 0.025 M in $NaIO_2$. The K_a for HIO_2 is 1.8×10^{-6}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 4.97

Calculate the pH to the nearest 0.01 unit of a solution which is 0.0085 M in HClO and 0.010 M in NaClO. The K_a for HClO is 3.7×10^{-8}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 7.50

Calculate the pH to the nearest 0.01 unit of a solution which is 0.090 M in $HBrO_2$ and 0.025 M in $NaBrO_2$. The K_a for $HBrO_2$ is 3.8×10^{-7}. Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 5.86