

Calculate the pH to the nearest 0.01 unit of a 0.015 M solution of NH_3 . The K_b for NH_3 is 1.8×10^{-5} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 10.71

Calculate the pH to the nearest 0.01 unit of a 0.025 M solution of CH_3NH_2 . The K_b for CH_3NH_2 is 2.29×10^{-11} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 7.88

Calculate the pH to the nearest 0.01 unit of a 0.050 M solution of $(\text{CH}_3)_3\text{N}$. The K_b for $(\text{CH}_3)_3\text{N}$ is 1.59×10^{-10} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 8.45

Calculate the pH to the nearest 0.01 unit of a 0.35 M solution of HONH_2 . The K_b for HONH_2 is 3.2×10^{-7} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 10.53

Calculate the pH to the nearest 0.01 unit of a 0.0025 M solution of $\text{C}_6\text{H}_5\text{NH}_2$. The K_b for $\text{C}_6\text{H}_5\text{NH}_2$ is 6.46×10^{-6} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 10.10

Calculate the pH to the nearest 0.01 unit of a 0.075 M solution of $(\text{CH}_3)_2\text{NH}$. The K_b for $(\text{CH}_3)_2\text{NH}$ is 2.0×10^{-11} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 8.09

Calculate the pH to the nearest 0.01 unit of a 0.0085 M solution of NH_3 . The K_b for NH_3 is 1.8×10^{-5} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 10.59

Calculate the pH to the nearest 0.01 unit of a 0.15 M solution of $\text{C}_5\text{H}_4\text{N}$. The K_b for $\text{C}_5\text{H}_4\text{N}$ is 7.59×10^{-12} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 8.03

Calculate the pH to the nearest 0.01 unit of a 0.0085 M solution of $\text{C}_6\text{H}_6\text{NH}_2$. The K_b for $\text{C}_6\text{H}_6\text{NH}_2$ is 6.46×10^{-6} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 10.37

Calculate the pH to the nearest 0.01 unit of a 0.090 M solution of HONH_2 . The K_b for HONH_2 is 3.2×10^{-7} . Write the Brønsted-Lowery reaction and the equilibrium expression.

ANS = 10.23