

Acid Base Equilibrium Problems

A student measures the pH of a 0.236 M solution of an unknown weak acid. The pH is 3.66. What is the K_a of the acid?

$$K_a = 2.0 \times 10^{-7}$$

Calculate the pH of a 0.045 M solution of Formic acid.

$$\text{pH} = 1.27$$

What is the pH of a 1.00 M solution of Pyridine?

$$\text{pH} = 9.59$$

A lab support technician prepares a 0.103 M solution of sodium acetate. What should be the pH of this solution?

$$\text{pH} = 8.88$$