

What is the average ionization constant for the unknown?

$$K_b = 2.36 \times 10^{-7}$$

Using Table 1, identify the unknown solution.

The unknown solution should be OCl^- with a K_b of 2.9×10^{-7}

What is the molarity of the unknown solution used in each titration?

What is the average molarity of the unknown solution?

Part B – Determination of the Ionization Constant (K_a or K_b) of an Unknown Solution from the Initial Concentration and pH or pOH of the Solution

Determine the pH of the solution. If the unknown solution is a base, how will you determine the pOH of the solution?

The pH of the unknown solution was 7.6. $\text{pOH} = 14 - \text{pH} = 14 - 7.6$

$$= 6.4$$