

Titration Curves

Weak Base

+ Strong Acid

0.1 M NH_3

0.1 M HCl

25.0 mL

25.0 mL

1. Initial pH



$$K_b = 1.8 \times 10^{-5} = \frac{[\text{OH}^-][\text{NH}_4^+]}{[\text{NH}_3]}$$

$$[\text{OH}^-] = 1.34 \times 10^{-3} \text{ M}$$

$$\text{pOH} = 2.87 \quad \text{pH} = 11.12$$

