


$$\text{pH} = \text{p}K_a + \log \frac{[\text{A}^-]}{[\text{HA}]}$$

$$K_b = 1.8 \times 10^{-3}$$


What is the pH of 100 mL of a 0.10 M solution of NH_3 

- a) 1.37 b) 1.87 c) 10.45 d) 12.13 e) 12.63

What volume of 1.00 M HCl is needed to reach the equivalence point? 

- a) 1000 mL b) 100 mL c) 10 mL d) 1 mL e) 0.1 mL

What is the pH at the equivalence point? 

- a) 2.35 b) 2.87 c) 3.25 d) 6.15 e)  1.65

What is the pH at the half-way point?

- a) 2.75 b) 6.15 c) 7.00 d) 10.35 e) 11.25