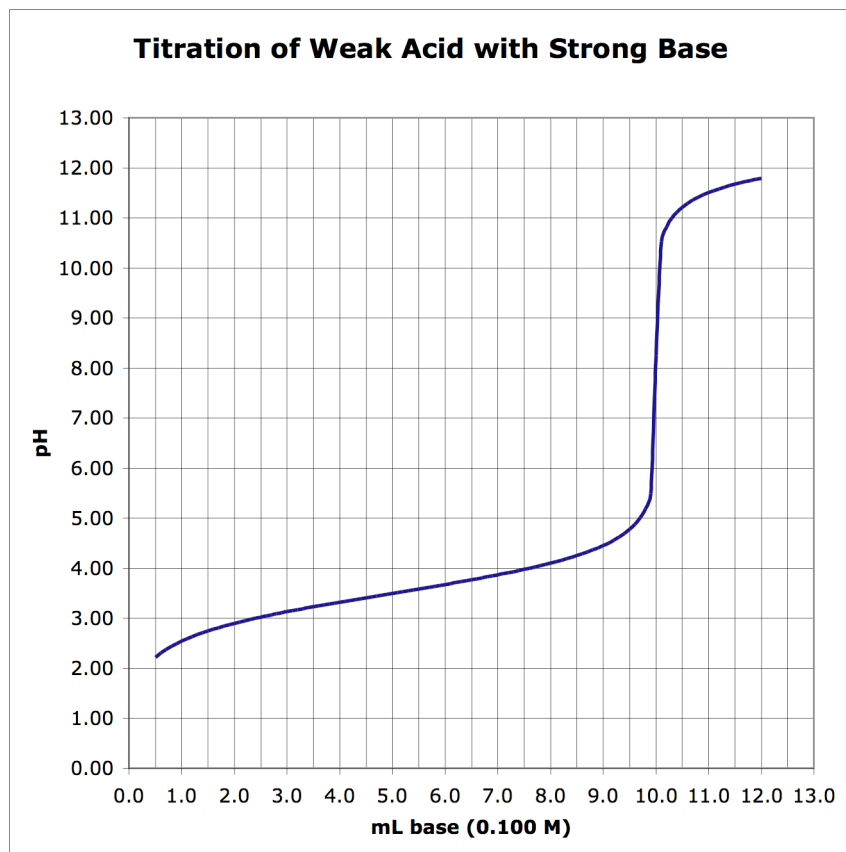


Titration of Weak Acids or Weak Bases



- 1) What is the pKa of the weak acid?
pKa = 3.5
- 2) What was the original concentration of the acid if the starting volume of acid was 18.60 mL?
[HA] = 5.38×10^{-2} M
- 3) Calculate the pH at the equivalence point.
pH = 8.04

- 4) What is the pKb of the weak base?
pKa = 10.5 so pKb = 3.5
- 5) What was the original concentration of the base if the starting volume of base was 7.50 mL?
[B:] = 0.133 M
- 6) Calculate the pH at the equivalence point.
pH = 5.86

