Titration Curves

I. Strong Acid   +   Strong Base

0.1 M HCl   0.1 M NaOH

25.0 mL   25.0 mL

2.5×10^{-3} mol 2.5×10^{-3} mol

1. Initial pH

   $HCl \rightarrow H^+ + Cl^-$

   0.1 M   0.1 M

   $[H^+] = 0.1\ M$

   $pH = -\log H^+ = 1.00$

pH

10.0

5.0

0   10   20   30   40   50

volume NaOH added (mL)