

# Polyprotic Acid



2 equivalents of base

0.10 M  $\text{H}_2\text{SO}_3$

40 mL

0.1 M NaOH

80 mL

**Initial pH**

$$1.4 \times 10^{-2} = \frac{[\text{HSO}_3^-][\text{H}^+]}{[\text{H}_2\text{SO}_3]} = \frac{x^2}{0.1 - x} \quad x = 0.03 \quad \text{pH} = 1.51$$