

Acid-Base Buffers Problem Set

This problem set was developed by [S.E. Van Bramer](#) for [Chemistry 146](#) at [Widener University](#).

1. For a 100.0 mL solution that is 0.1 M acetic acid calculate the concentration of acetate ion, hydronium ion, and the pH.
2. For a 100.0 mL solution that is 0.1 M acetic acid and 0.1 M in sodium acetate calculate the concentration of acetate ion, hydronium ion, and the pH.
3. For a 100.0 mL solution that is 0.1 M acetic acid and 0.05 M in sodium acetate calculate the concentration of acetate ion, hydronium ion, and the pH.
4. For a 100.0 mL solution that is 0.1 M acetic acid and 0.15 M in sodium acetate calculate the concentration of acetate ion, hydronium ion, and the pH.
5. For a 100.0 mL solution that is 0.1 M acetic acid and 0.2 M in sodium acetate calculate the concentration of acetate ion, hydronium ion, and the pH.