

Acids & Bases Worksheet #4: Buffers

1. What is the pH of a buffer that is 0.32 M $\text{HC}_2\text{H}_3\text{O}_2$ and 0.13 M $\text{NaC}_2\text{H}_3\text{O}_2$?

pH = 4.36

2. What is the pH of a buffer made from 0.52 M benzoic acid ($\text{HC}_7\text{H}_5\text{O}_2$) and 0.81 M sodium benzoate ($\text{NaC}_7\text{H}_5\text{O}_2$) ?

pH = 4.39

3. What is the pH of a buffer made from 0.38 M NH_3 and 0.61 M NH_4Cl ?

pH = 9.05

4. What is the pH of a buffer made from 0.15 M NaClO and 0.24 M HClO?

pH = 7.32

5. What is the pH of a buffer made from 0.15 M HF and 0.21 M NaF?

pH = 3.32

6. What is the pH of a buffer made from 0.65 M HNO₂ and 0.62 M KNO₂?

pH = 3.33

7. What is the pH of a buffer made from 0.22 M C₅H₅N (pyridine) and 0.17 M HC₅H₅NCl ?

pH = 5.34