

Prelab Question – Experiment 3: Acids, Bases, and Buffers, Week 2

1. Using Appendix D in your textbook, find and tabulate the K_a values for each of the following acids. Using those K_a values, calculate the pK_a of each acid (for di/triprotic acids, you only have to use K_{a1}).

acetic acid

chloroacetic acid

formic acid

oxalic acid

boric acid

lactic acid

phosphoric acid

citric acid

tartaric acid

2. A 10.00 mL sample of an unknown weak acid is titrated to the equivalence point with 16546.7 μL of 0.100 M NaOH. Calculate the concentration of the unknown weak acid.