Lab # 18

Pre-Lab Questions:

1. What is the difference between a weak acid and a strong acid?
2. Why is the pH>7 at the equivalence point for a weak acid-strong base neutralization reaction?
3. Why is the pH=pKa at Veq/2 in a weak acid-strong base neutralization reaction?
4. Why do we have to include @ temperature for the Ka value?

Post-Lab Questions:

1. Calculate the Ka and find the molar mass of the unknown acid

Let’s say that you are given a 0.215g of unknown weak acid and asked to dilute with 75 mL of DI water. You then use a standardized 0.125 M NaOH to titrate the unknown acid solution. For the titration you are using a pH meter and taking volume readings of the NaOH added. The resulting graph can be seen below.

Ka =

MM =