Neutralization of Antacid Tablet Prelab

*Please do not give short (one or two word answers) to the questions.*

*ALL Answers must be written by hand directly into your lab notebooks.*

1. What is the difference between $K_a$ and $K_b$ and what is the mathematical relationship between them?

2. What is the equation for $pK_a$ from $K_a$ and what does a low $pK_a$ mean for an acid?

3. A 25.00 mL sample of an unknown diprotic weak acid is titrated to the equivalence point with 17.48 mL of 0.09475 M NaOH. Calculate the concentration of the unknown weak acid.