PRE-LABORATORY ASSIGNMENT
TITRATION OF ACIDS AND BASES (B): Equivalent Weight Calculation

Name ______________________________________ Section ________

1. In this experiment you will begin by preparing a dilute solution of sodium hydroxide (NaOH) by tak-
ing 50 mL of a 3 N NaOH stock solution and diluting it with 250 ml. of water.
   (a) What is the approximate normality of the NaOH solution you will pre-
   pare?

   (b) Calculate the amount (equivalents) and mass of oxalic acid dihydrate [H$_2$C$_2$O$_4$•2H$_2$O] re-
   quired to neutralize 35 mL of the dilute NaOH solution you have made up above. (Oxalic acid dihydrate
   releases two H$^+$ ions per molecule of acid.)

2. A 1.00 gram sample of citric acid requires 31.23 mL of 0.500 N NaOH for titration.
   (a) Calculate the amount (equivalents) of NaOH used in the titration.

   (b) What amount (equivalents) of citric acid was titrated?

   (c) Calculate the equivalent weight of citric acid.