1. Attach the buret clamp to the ring stand.

2. Place 20 mL each of the analyte solutions in labeled 100 mL beaker and add 20 ml of distilled water.

3. Close the valve of the buret. Rinse the buret.

5. Fill the buret with the titrant; fill above the zero mark.

7. Drain enough solution from each buret into the waste beaker to

remove the air from the buret tip, to rinse the buret tip, and to bring

the liquid level into the graduated region of the buret.

8. In the data table, record the initial reading of the buret,

estimating to the nearest 0.01 mL. Record the concentration of the

solutions.

9. Into the Erlenmeyer flask, draw off 10 to 15 mL of the acid. Add

distilled water to the flask to bring the volume up to about 25 mL.

Add two drops phenolphthalein indicator. If using a magnetic stirrer,

put a stir bar into the flask.

10. Place the flask underneath the base buret. Make sure the base buret

tip extends slightly down into flask. Slowly release the NaOH from

the buret into the flask while constantly swirling the contents of the

flask. Stop occasionally to wash down the inside surfaces of the flask

frequently with a little distilled water from the wash bottle. If using

a magnetic stirrer it should be on a slow to medium setting.

11. When a pink color begins to appear at the point of contact with the

base, add the base drop by drop. When the last drop added causes

the color to just appear and it does not disappear, stop the titration.

A sheet of white paper under the flask makes it easier to detect the

color change.

12. If you overshoot the end point, add enough acid from the acid buret on the left to make

the solution clear. Try again to get the very light pink color again by adding NaOH drop

by drop and swirling in between drops.

13. Read the burets to the nearest 0.01 mL and record these final readings in the data table.

14. Discard the liquid from the flask and rinse it with tap water a few times and then with

distilled water a few times. Refill the burets with acid and base and run a second and third

trial using the same procedure.

15. Dispose of all solutions as directed by your teacher. Clean all glassware as instructed

by your teacher.