## Titration Worksheet

1. Determine moles of the substance you have 2 pieces of info for.
2. Use the mole ratio to determine moles of unknown substance.
3. Determine the concentration.
4. If it takes 54 mL of 0.1 M NaOH to neutralize 125 mL of an HCl solution, what is the concentration of the HCl ?
5. If it takes 25 mL of 0.05 M HCl to neutralize 345 mL of NaOH solution, what is the concentration of the NaOH solution?
6. If it takes 50 mL of $0.5 \mathrm{M} \mathrm{Ca}(\mathrm{OH})_{2}$ solution to completely neutralize 125 mL of sulfuric acid solution $\left(\mathrm{H}_{2} \mathrm{SO}_{4}\right)$, what is the concentration of the $\mathrm{H}_{2} \mathrm{SO}_{4}$ solution?
7. How many milliliters of $0.360 \mathrm{M} \mathrm{H}_{2} \mathrm{SO}_{4}$ are required to neutralize 25.0 mL of $0.100 \mathrm{M} \mathrm{Ba}(\mathrm{OH})_{2}$ ?
8. What is the molarity of a 30.0 mL hydrochloric acid solution $(\mathrm{HCl})$ which is just neutralized by 48.0 mL of 0.100 M sodium hydroxide $(\mathrm{NaOH})$ ?
