# Solution Stoichiometry, Extra Exercises

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the amount concentration of a KOH(aq)solution if 12.8 mL of this solution is required to react with 25.0 mL of 0.110 mol/L H2SO4(aq)?
2. What volume of 0.125 mol/L NaOH(aq)is required to react completely with 15.0 mL of 0.100 mol/L Al2(SO4)3(aq)?
3. In a chemical analysis, a 10.0 mL sample of H3PO4(aq)was reacted with 18.2 mL of 0.259 mol/L NaOH(aq). Calculate the amount concentration of the phosphoric acid.
4. The concentration of magnesium ions (assume magnesium chloride) in sea water was analyzed and found to be 50.0 mmol/L. What volume of 0.200 mol/L sodium hydroxide solution would be needed in an industrial process to precipitate all of the magnesium ions from 1.00 ML (mega litres!) of sea water?