

Chemistry – Chapter 19 Book problems #4: Neutralization calculations

1. How many moles of potassium hydroxide are needed to neutralize 1.56 mol of phosphoric acid?
2. How many moles of sodium hydroxide are required to neutralize 0.20 mol of nitric acid?
3. How many milliliters of 0.45 M HCl will neutralize 25.0 mL of 1.00 M KOH?
4. What is the molarity of a solution of H_3PO_4 if 15.0 mL is neutralized by 38.5 mL of 0.150 M NaOH?
5. How many moles of HCl are required to neutralize aqueous solutions of these bases?
 - A. 0.03 mol KOH
 - B. 2 mol NH_3
 - C. 0.1 mol $\text{Ca}(\text{OH})_2$
6. What is the molarity of sodium hydroxide if 20.0 mL of the solution is neutralized by each of the following 1.00 M solutions?
 - A. 28.0 mL HCl
 - B. 17.4 mL H_3PO_4