### **Answers for Practice Problems B in page 307**

# Answers to Practice Problems B

- 1. 45.6 g Al
- 2. 44.6 g Al<sub>2</sub>O<sub>3</sub>
- 3. 679 g Fe<sub>2</sub>O<sub>3</sub>
- 4. 107 g Fe

# Homework

#### GENERAL

#### Additional Practice

- What mass of H<sub>2</sub>O is produced if 65.2 g CaCO<sub>3</sub> reacts with excess H<sub>3</sub>PO<sub>4</sub>, to form Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, H<sub>2</sub>O, and CO<sub>2</sub>?
  Ans. 3CaCO<sub>3</sub>(s) + 2H<sub>3</sub>PO<sub>4</sub>(aq) → Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>(s) + 3H<sub>2</sub>O(l) + 3CO<sub>2</sub>(g); 11.7 g H<sub>2</sub>O
- 2. What mass of O<sub>2</sub> forms when 49.89 g KClO<sub>3</sub> decomposes? (KCl also forms.) Ans. 2KClO<sub>3</sub>(s) → 2KCl(s) + 3O<sub>2</sub>(g); 19.54 g O<sub>2</sub>
- What mass of ammonia is formed when 7.50 g N<sub>2</sub> reacts with excess H<sub>2</sub>? Ans. N<sub>2</sub>(g) + 3H<sub>2</sub>(g) → 2NH<sub>3</sub>(g); 9.12 g NH<sub>3</sub>

## Logical