

Answers to problems in page 307.

Answers to Practice Problems B

1. 45.6 g Al
2. 44.6 g Al₂O₃
3. 679 g Fe₂O₃
4. 107 g Fe

Homework

GENERAL

Additional Practice

1. What mass of H₂O is produced if 65.2 g CaCO₃ reacts with excess H₃PO₄ to form Ca₃(PO₄)₂, H₂O, and CO₂?

Ans. $3\text{CaCO}_3(s) + 2\text{H}_3\text{PO}_4(aq) \rightarrow \text{Ca}_3(\text{PO}_4)_2(s) + 3\text{H}_2\text{O}(l) + 3\text{CO}_2(g)$; 11.7 g H₂O

2. What mass of O₂ forms when 49.89 g KClO₃ decomposes? (KCl also forms.) **Ans.** $2\text{KClO}_3(s) \rightarrow 2\text{KCl}(s) + 3\text{O}_2(g)$; 19.54 g O₂

3. What mass of ammonia is formed when 7.50 g N₂ reacts with excess H₂? **Ans.** $\text{N}_2(g) + 3\text{H}_2(g) \rightarrow 2\text{NH}_3(g)$; 9.12 g NH₃

 Logical