

## Answers to Practice Problems A in page 304

### Answers to Practice Problems A

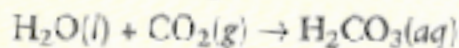
- a. 0.670 mol O<sub>2</sub>  
b. 1.34 mol H<sub>2</sub>O
- a. 6.60 mol Al  
b. 6.60 mol Fe  
c. 3.30 mol Al<sub>2</sub>O<sub>3</sub>

### Homework

GENERAL

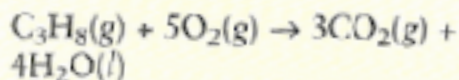
#### Additional Practice

1. How many moles of H<sub>2</sub>CO<sub>3</sub> can form when 2.57 mol CO<sub>2</sub> reacts with excess H<sub>2</sub>O?



Ans. 2.57 mol H<sub>2</sub>CO<sub>3</sub>

2. How many moles of O<sub>2</sub> are necessary to completely burn 4.33 mol C<sub>3</sub>H<sub>8</sub>? How many moles of CO<sub>2</sub> form? How many moles of H<sub>2</sub>O form?



Ans. 21.6 mol O<sub>2</sub>; 13.0 mol CO<sub>2</sub>; 17.3 mol H<sub>2</sub>O

3. In the combustion of propane, how many moles of C<sub>3</sub>H<sub>8</sub> are needed to combine completely with 2.96 mol O<sub>2</sub>? How many moles of CO<sub>2</sub> form? How many moles of H<sub>2</sub>O form? Ans. 0.592 mol C<sub>3</sub>H<sub>8</sub>; 1.78 mol CO<sub>2</sub>; 2.37 mol H<sub>2</sub>O

 Logical