

Answers to Practice Problems I

- 2.17 cycles; after 3 full cycles all of the 1.00 mL of isooctane will have reacted
- 8.65 mL isooctane
- $2\text{CH}_3\text{OH} + 3\text{O}_2 \rightarrow 2\text{CO}_2 + 4\text{H}_2\text{O}$; 2.2×10^2 L air

Homework

GENERAL

Additional Practice

- How many liters of air are needed to completely burn 2.00 mL C_8H_{18} ? The density of C_8H_{18} is 0.692 g/mL, and the density of O_2 is 1.33 g/L. Air is 21% oxygen by volume.
Ans. 17.3 L of air
- How many grams of O_2 are needed to completely burn 528.7 g C_8H_{18} ? **Ans. 1851 g O_2**

 Logical