

Answers to problems in page 309

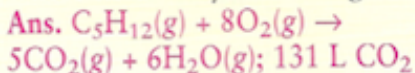
Answers to Practice Problems C

1. 315 mL C₅H₈
2. 2.03×10^3 L H₂
3. 113 mL C₅H₁₂
4. 7.64×10^5 mL H₂

Homework — GENERAL

Additional Practice Write balanced chemical equations for each of the following problems, and then solve.

1. When pentane, C₅H₁₂, burns in oxygen, it produces carbon dioxide and water. If 85.5 g of pentane is completely burned, what volume of carbon dioxide is produced? Assume the CO₂ cools to room temperature, where its density is 1.997 g/L.



2. Magnesium burns in oxygen to produce magnesium oxide. What mass of magnesium will burn in the presence of 189 mL of oxygen? The density of oxygen is 1.429 g/L. **Ans.** $2\text{Mg}(\text{s}) + \text{O}_2(\text{g}) \rightarrow 2\text{MgO}(\text{s}); 0.410 \text{ g Mg}$

LS Logical