MY FAVORITE MISTAKE

Identify where the mistake is in the steps and answer the questions in the table that follow.

**Problem:** How many moles of O₂ do you need to burn 3 moles of C₄H₁₀?

*Given equation:* \_\_C₄H₁₀ + \_\_13O₂ → \_\_CO₂ + \_\_H₂O

*Step 1:* Balance the equation:

2C₄H₁₀ + 5O₂ → 8CO₂ + 10H₂O

*Step 2:* Mole-to-mole ratio:

2 moles C₄H₁₀ require 26 moles O₂

*Step 3:* Using the given information solve the problem:

|  |  |
| --- | --- |
| 3 moles C₄H₁₀ | 5 moles O₂ |
|  | 2 moles C₄H₁₀ |

= 39 moles O₂

# Q1. What are two things that are done well?

# Q2. Where is the mistake?

# Q3. What should be done differently?

# Q4. What is the correct answer?