# Open Chemistry Online – Post Quiz #5 (OpenStax Ch: 4.4)

The balanced chemical reaction below shows the combustion of propane in oxygen, creating carbon dioxide and water:

Text

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1. What is the mass in grams of carbon dioxide (CO2) that will be formed from the combustion of 100.0 g C3H8 in excess O2? Show all work for this calculation for full credit.
2. What is the mass in grams of carbon dioxide (CO2) that will be formed from the combustion of 300.0 g O2 in excess propane (C3H8)? Show all work for this calculation for full credit.
3. Which of the two examples (100.0 g C3H8 in excess O2, vs. 300.0 g O2 in excess C3H8) creates the greater amount of CO2? Based on this, if we burn 100g C3H8 in 300g O2, which of the two reactants will run out first?
4. What mass of carbon dioxide will be created in the combustion of 100.0 g C3H8 in 300.0 g O2?