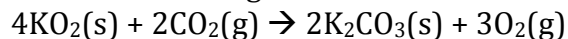


CH301
FALL 2011
Vanden Bout/LaBrake

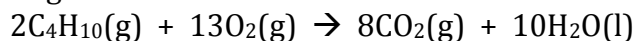
MORE STOICHIOMETRY PRACTICE

1. Consider the following reaction:



How many moles of KO_2 are needed to react with 75.0 L of carbon dioxide at -25°C and 215 kPa?

2. Consider the following reaction:



(a) How many grams of carbon dioxide are formed when 55.5 g of butane reacts with 45.5 g O_2 ?

(b) If $P=135$ kPa and $T=270$ K, what is the volume of this amount of carbon dioxide? What is the total final volume of this system?

(c) Starting over, 43.2 L of butane is mixed with 76.0 L of O_2 at the same pressure and temperature to give an initial volume of 119.2 L. After butane and O_2 react, the total volume changes, Assuming that the reaction runs to completion, what is the final volume?