General Chemistry
Mr. MacGillivray
Quiz #27:
Gas Stoichiometry

Solve the following problems, which refer to the chemical equation shown below. Show all work.

$$\mathbf{C_3H_8\ (g) + 5\ O_2\ (g) \Rightarrow 3\ CO_2\ (g) + 4\ H_2O\ (g)}$$

1. How many liters (at STP) of water vapor can be produced from the complete combustion of 10.0 g of propane gas (C_3H_8)?

2. Re-calculate the answer to #1, assuming that the reaction is carried out at 100 degrees Celsius and 1.30 atm of pressure.