General Chemistry Mr. MacGillivray Quiz #27: Gas Stoichiometry

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

 $C_{3}H_{8}(g) + 5O_{2}(g) \Rightarrow 3CO_{2}(g) + 4H_{2}O(g)$

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.