Empirical formula/Molecular Formula Problem

1. 0.600 g of an organic compound known to contain only C, H, and O is found to contain 0.309 g of C and 0.0172 g of H
   (a) What is the mass of O in the sample?

   (b) What is the percentage composition by mass?

   (c) What is the empirical formula of the compound?

   (d) What is the molecular formula if the molecular weight is found to be 220 ± 25 amu?
      {i.e., the molar mass is 220 ± 25 g/mol}