Mole Practice Problem Worksheet #6   Molecular Formula

Calculate the molecular formula for each of the compounds given below.

1. Given: Empirical Formula CH_2 and molar mass = 84 g/mol

2. Given: Empirical Formula NH_2Cl and molar mass = 51.5 g/mol

3. Given: Empirical Formula HCO_2 and molar mass = 90.0 g/mol

4. Given: Empirical Formula C_2H_4O and molar mass = 88 g/mol

5. Given: Empirical Formula $C_3H_4O_3$ and molecular weight = 176 amu

6. Given: 25.69% C, 8.80% H, 15.51% O and molar mass 206 g/mol

7. Given: 59.0% C, 7.1% H, 26.2% O, 7.7% N and molar weight = 180amu

8. Given: 49.5% C, 5.15% H, 28.9% N, 16.5% O and molar mass=195g/mol

9. Given: 35.51% C, 4.77% H, 37.85% O, 8.29% N, 13.60% Na and molar mass=169g/mol

10. Given: 38.7% C, 9.7% H, 51.6% O and molar mass = 62.1g/mol