



4. Find the empirical formula of a compound that contains 30.45% nitrogen and 69.55% oxygen.
5. A compound containing only boron and iodine is known to have a molar mass of 391.5 g/mol. A 310.8 g sample of this compound was found to contain 302.2 g of iodine. What is the molecular formula of this compound?
6. A compound containing only carbon and hydrogen has a molecular mass of 114.26 u. If one mole of the compound contains 18.17 g of hydrogen, what is its molecular formula?