**Empirical Formula Questions**

**Question 1**

What is the empirical formula of a compound containing 60.0% sulfur and 40.0% oxygen by mass?

**Question 2**

A compound is found to contain 23.3% magnesium, 30.7% sulfur and 46.0% oxygen. What is the empirical formula of this compound?

**Question 3**

What is the empirical formula for a compound containing 38.8% carbon, 16.2% hydrogen and 45.1% nitrogen?

**Question 4**

A sample of an oxide of nitrogen is found to contain 30.4% nitrogen. What is its empirical formula?

**Question 5**

A sample of an oxide of arsenic is found to contain 75.74% arsenic. What is its empirical formula?

**Question 6**

What is the empirical formula for a compound containing 26.57% potassium, 35.36% chromium, and 38.07% oxygen?

**Question 7**

What is the empirical formula of a compound comprised of 1.8% hydrogen, 56.1% sulfur and 42.1% oxygen?

**Question 8**

A borane is a compound containing only boron and hydrogen. If a borane is found to contain 88.45% boron, what is its empirical formula?

**Question 9**

Find the empirical formula for a compound containing 40.6% carbon, 5.1% hydrogen, and 54.2% oxygen.

**Question 10**

What is the empirical formula of a compound containing 47.37% carbon, 10.59% hydrogen and 42.04% oxygen?

**Answers**

1. SO3  
2. MgSO3  
3. CH5N  
4. NO2  
5. As2O3  
6. K2Cr2O7  
7. H2S2O3  
8. B5H7  
9. C2H3O2  
10. C3H8O2