

II. TYPES OF FORMULAS

MOLECULAR FORMULA	EMPIRICAL FORMULA
FORMULA THAT SHOWS THE ACTUAL NUMBER OF ATOMS IN A SUBSTANCE	FORMULA IN WHICH ELEMENTS ARE PRESENT IN THE SMALLEST WHOLE NUMBER RATIO
$C_6H_{12}O_6$	$C_2H_2O_1$

Part A- Determine the empirical formula for the following:

Molecular	Empirical
C_2H_4	
C_4H_{12}	
N_4O_4	
Al_4O_6	
C_8H_{16}	
$H_2C_2O_4$	
C_6H_{18}	
CO_2	
C_6H_6	
P_4O_{10}	

Part B- Determine the molecular formula for the following:

1. What is the molecular formula of a compound that has an empirical formula of NO_2 and a molecular mass of 92.
2. What is the molecular formula of a compound that has an empirical formula of CH_2 and a molecular mass of 56.
3. What is the molecular formula of a compound that has an empirical formula of CH_2 and a molecular mass of 42.