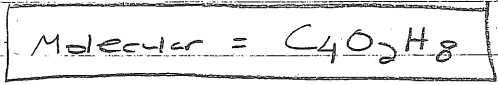


Empirical and Molecular Formula W.S.

- 1) CH 2) C₄H₉ 3) WO₂ 4) CH₃O 5) X₃Y

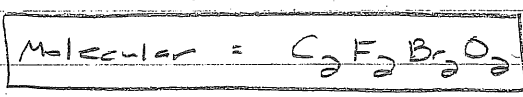
6) C₂O₄H₈ = 44.06 g
 $\frac{88}{44.06} = 2$



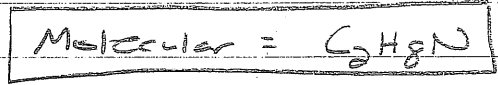
7) C₄H₄O = 68.08 g
 $\frac{136}{68.08} = 2$



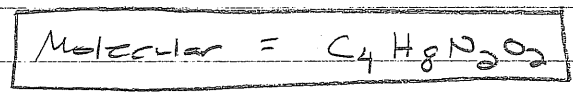
8) C₂F₂Br₂O = 126.91 g
 $\frac{254.7}{126.91} = 2$



9) C₂H₈N = 46.11 g
 $\frac{46}{46.11} = 1$



10) C₂H₄N₂O = 58.07 g
 $\frac{116.1}{58.07} = 2$



12) $\frac{1 \text{ mol N}}{14.01 \text{ g N}} \mid \frac{36.48 \text{ g N}}{2.6296} = 2.6296 \text{ mol N} = 1 \times 2 = 2$

$\frac{1 \text{ mol O}}{16.00 \text{ g O}} \mid \frac{63.16 \text{ g O}}{2.6296} = 3.9475 \text{ mol O} = 1.5 \times 2 = 3$



$$13) \frac{1 \text{ mol In}}{114.82 \text{ g In}} \left| \frac{0.2404 \text{ g In}}{0.0022609 \text{ mol In}} = \frac{0.0022609 \text{ mol In}}{0.0022609} = 1 \right.$$

$$\frac{1 \text{ mol Cl}}{35.45 \text{ g Cl}} \left| \frac{0.5000 \text{ g Cl}}{0.0067814 \text{ mol Cl}} = \frac{0.0067814 \text{ mol Cl}}{0.0022609} = 3 \right.$$



$$14) \frac{1 \text{ mol K}}{39.10 \text{ g K}} \left| \frac{47.0 \text{ g K}}{1.2020 \text{ mol K}} = \frac{1.2020 \text{ mol K}}{1.2020} = 1 \right.$$

$$\frac{1 \text{ mol C}}{12.01 \text{ g C}} \left| \frac{14.5 \text{ g C}}{1.2073 \text{ mol C}} = \frac{1.2073 \text{ mol C}}{1.2020} = 1 \right.$$

$$\frac{1 \text{ mol O}}{16.00 \text{ g O}} \left| \frac{38.5 \text{ g O}}{2.4063 \text{ mol O}} = \frac{2.4063 \text{ mol O}}{1.2020} = 2 \right.$$



$$\frac{166.22 \text{ g/mol}}{83.11 \text{ g/mol}} = 2 \quad \text{Molecular} = \text{K}_2\text{C}_2\text{O}_4$$

$$15) \frac{1 \text{ mol C}}{12.01 \text{ g C}} \left| \frac{60.0 \text{ g C}}{4.9958 \text{ mol C}} = \frac{4.9958 \text{ mol C}}{1.6625} = 3 \right.$$

$$\frac{1 \text{ mol H}}{1.01 \text{ g H}} \left| \frac{13.4 \text{ g H}}{13.267 \text{ mol H}} = \frac{13.267 \text{ mol H}}{1.6625} = 8 \right.$$

$$\frac{1 \text{ mol O}}{16.00 \text{ g O}} \left| \frac{26.2 \text{ g O}}{1.6625 \text{ mol O}} = \frac{1.6625 \text{ mol O}}{1.6625} = 1 \right.$$

