

Method #2

$$1.5 \text{ g CO}_2 \times \frac{12.01 \text{ g C}}{44.01 \text{ g}} = 0.409339 \text{ g C} \times \frac{1 \text{ mol C}}{12.01 \text{ g}} = 0.034044 \text{ mol C} \quad \begin{array}{l} / 0.034044 \\ \times 3 \end{array}$$

$$0.41 \text{ g H}_2\text{O} \times \frac{2.02 \text{ g}}{18.02 \text{ g}} = 0.04596 \text{ g H} \times \frac{1 \text{ mol H}}{1.008 \text{ g}} = 0.045595 \text{ mol H} \quad \begin{array}{l} / 0.034044 \\ = 1.33 \\ \times 3 \end{array}$$

$$1.0 - 0.409339 - 0.04596 = 0.54470 \text{ g O} \times \frac{1 \text{ mol O}}{16 \text{ g}} = 0.034044 \text{ mol O} \quad \begin{array}{l} / 0.034044 \\ \times 3 \end{array}$$

