

Exercice 6

$$\begin{aligned} 1. \text{NH}_4\text{NO}_3 &= 2 \text{ atomes d'azote (N)} \\ &= 4 \text{ atomes d'hydrogène (H)} \\ &= 3 \text{ atomes d'oxygène (O)} \end{aligned}$$

$$\begin{aligned} 2. n = \text{NH}_4\text{NO}_3 &= 2 \times n(\text{N}) + 4 \times n(\text{H}) + 3 \times n(\text{O}) \\ &= 2 \times 14 + 4 \times 1 + 3 \times 16 \\ &= 28 + 4 + 48 \\ &= 80 \text{ g/mol} \end{aligned}$$

Exercice 7

$$\begin{aligned} 1. \text{SO}_2 &= 1 \text{ atome de soufre (S)} \\ &= 2 \text{ atome d'oxygène (O)} \end{aligned}$$

$$\begin{aligned} 2. n = \text{SO}_2 &= 1 \times n(\text{S}) + 2 \times n(\text{O}) \\ &= 1 \times 32 + 2 \times 16 \\ &= 32 + 32 \\ &= 64 \text{ g/mol} \end{aligned}$$

Exercice 8

$$\begin{aligned} 1. \text{C}_{17}\text{H}_{33}\text{COONa} &= 18 \text{ atomes de carbone (C)} \\ &= 33 \text{ atomes d'hydrogène (H)} \\ &= 2 \text{ atome d'oxygène (O)} \\ &= 1 \text{ atome de sodium (Na)} \end{aligned}$$

$$\begin{aligned} 2. n = \text{C}_{17}\text{H}_{33}\text{COONa} &= 18 \times n(\text{C}) + 33 \times n(\text{H}) + 2 \times n(\text{O}) + 1 \times n(\text{Na}) \\ &= 18 \times 12 + 33 \times 1 + 2 \times 16 + 1 \times 23 \\ &= 216 + 33 + 32 + 23 \\ &= 304 \text{ g/mol} \end{aligned}$$