

1. Berapa gram massa $1,204 \times 10^{25}$ molekul CO_2 ? Diketahui Ar C = 12, O = 16

Jawab

$$\begin{aligned}\text{Mr CO}_2 &= \text{Ar C} + (\quad \times \text{Ar O}) \\ &= \quad + (\quad \times \quad) \\ &= \quad + \quad \\ &= \quad\end{aligned}$$

$$\text{mol CO}_2 = \frac{\text{jumlah molekul CO}_2}{L}$$

$$\text{mol CO}_2 = \frac{\quad \times 10}{\quad \times 10}$$

$$\text{mol CO}_2 = \quad \text{mol}$$

$$\text{massa CO}_2 = \text{mol} \times \text{Mr}$$

$$= \quad \times$$

$$= \quad \text{gram}$$

2. Berapa liter volume 6,8 gram gas H_2S yang diukur pada keadaan standar?

Jawab

$$\begin{aligned}\text{Mr H}_2\text{S} &= (\quad \times \text{Ar H}) + \text{Ar S} \\ &= (\quad \times \quad) + \quad \\ &= \quad + \quad \\ &= \quad\end{aligned}$$

$$\text{mol H}_2\text{S} = \frac{\text{massa (gram)}}{\text{Mr}}$$

$$= \quad$$

$$= \quad \text{mol}$$

$$\text{volume H}_2\text{S (STP)} = \text{mol} \times \text{volume standar}$$

$$= \quad \times$$

$$= \quad \text{liter}$$