

Taller

Solución

$$\textcircled{1} m = 82.5 \text{ g}$$
$$\text{Volumen} = 0.45$$

$$C = 2 \times 12 = 24$$

$$H = 6 \times 1 = 6$$

$$O = 1 \times 16 = \frac{16}{46}$$

$$82.5 / 46 = 1.77 / 0.45$$
$$= 39$$

$$\underline{m = 39}$$

$$\frac{82.5 \times 1000}{46 \times 0.45} = \frac{825}{20.7} = 39$$

$\textcircled{2}$  obtenga la molaridad de una sustancia con 4.78 mol en volumen de 7000 ml

$$n = 4.78 \text{ mol}$$

$$V = 7000 \text{ ml} / 1000 = 7$$

$$V = 7 \text{ Litros}$$

$$M = 4.78 \text{ mol} / 7 \text{ L} = 0.682$$

$$M = 0.682 \text{ mol/L}$$



$$\textcircled{3} \quad m = 3.65 \text{ g}$$

$$\text{volumen} = 2.00 \text{ L}$$

$$H = 1 \times 1 = 1$$

$$Cl = 1 \times 35 = \frac{35}{36}$$

$$3.65 / 36 = 10 / 2.00$$

$$20.0 = 5$$

$$m = 309$$

$$\frac{365 \times 1000}{36 \times 2.00} = \frac{365}{72} = 5$$

$\textcircled{4}$

$$m = 49.04$$

$$\text{volumen} = 250 \text{ ml} / 1000 = 0.25 \text{ L}$$

$$H = 2 \times 1 = 2$$

$$S = 1 \times 32 = 32$$

$$O = 4 \times 16 = \frac{64}{98}$$

$$49.04 / 98 = 50 / 0.25$$
$$= 200$$

$$m = 200$$