

Problema 136: Realiza os seguintes cambios de unidades:

a)  $1 \text{ g/mL}$  (a  $\text{kg/m}^3$ ) =

$$1 \text{ g/mL} = 1 \frac{\text{g}}{\text{cm}^3} \cdot \frac{1 \text{ kg}}{1000 \text{ g}} \cdot \frac{10^6 \text{ cm}^3}{1 \text{ m}^3} = 1000 \text{ kg/m}^3$$

b)  $13600 \text{ kg/m}^3$  (a  $\text{g/mL}$ ) =

$$13600 \text{ kg/m}^3 = 13600 \frac{\text{kg}}{\text{m}^3} \cdot \frac{1000 \text{ g}}{1 \text{ kg}} \cdot \frac{1 \text{ m}^3}{10^6 \text{ cm}^3} = 13,6 \text{ g/mL}$$

c)  $19,28 \text{ g/cm}^3$  (a  $\text{kg/m}^3$ ) =

$$19,28 \text{ g/cm}^3 = 19,28 \frac{\text{g}}{\text{cm}^3} \cdot \frac{1 \text{ kg}}{1000 \text{ g}} \cdot \frac{10^6 \text{ cm}^3}{1 \text{ m}^3} = 19280 \text{ kg/m}^3$$

d)  $1,2 \text{ g/dm}^3$  (a  $\text{kg/m}^3$ ) =

$$1,2 \text{ g/dm}^3 = 1,2 \frac{\text{g}}{\text{dm}^3} \cdot \frac{1 \text{ kg}}{1000 \text{ g}} \cdot \frac{10^3 \text{ dm}^3}{1 \text{ m}^3} = 1,2 \text{ kg/m}^3$$