



1. $V_1 = 23 \text{ cm}^3$

$$T_1 = 69^\circ \text{C}$$

$$V_2 = ?$$

$$T_2 = 13^\circ \text{C}$$

$$V_1 = 23 \text{ cm}^3$$

$$T_1 = 69^\circ \text{C} + 273 = 342 \text{ K}$$

$$V_2 = ?$$

$$T_2 = 13^\circ \text{C} + 273 = 286 \text{ K}$$

$$V_2 = \frac{V_1 \cdot T_2}{T_1}$$

$$V_2 = \frac{23 \cdot 286}{342}$$

$$V_2 = 19.2 \text{ cm}^3$$

2

$$V_1 = 2.5 \text{ L}$$

$$T_1 = 50^\circ\text{C} + 273 = 323 \text{ K}$$

$$T_2 = 25^\circ\text{C} + 273 = 298 \text{ K}$$

$$V_2 = \frac{2.5 \cdot 298}{323}$$

$$V_2 = 2.30 \text{ L}$$

3. $V_1 = 4 \text{ L}$

$$T_1 = 31^\circ\text{C} + 273 = 304 \text{ K} \times T_2 = \frac{T_1 \cdot V_1}{V_2}$$

$$T_2 = ?$$

$$V_2 = 1.2 \text{ L}$$

$$T_2 = \frac{304 \cdot 4}{1.2}$$

$$T_2 = 91.2 \text{ K}$$

