

Συνηθισμένα λάθη που πρέπει να αποφεύγονται στις εξετάσεις:

$$\Rightarrow \frac{1}{393,15 \text{ K}} - \frac{1}{273,15 \text{ K}} = \frac{-8,31446 \text{ J K}^{-1} \text{ mol}^{-1} \times 0,68}{\Delta h_{\text{vap}}} \Rightarrow$$

$$-\frac{1}{393,15 \text{ K}} + \frac{1}{273,15 \text{ K}} = \frac{0,46 \text{ J K}^{-1} \text{ mol}^{-1}}{\Delta h_{\text{vap}}}$$

$$\Rightarrow \Delta h_{\text{vap}} = \frac{-393,15 \text{ K} + 273,15 \text{ K}}{0,46 \text{ J K}^{-1} \text{ mol}^{-1}} = 40000 \text{ J mol}^{-1}$$

4 λάθη

$$-\frac{12400 \text{ J}}{273 \text{ K}} = 12.127 \text{ J K}^{-1}$$

2 λάθη

$$\ln \frac{120}{100} = - \frac{\Delta h_{\text{vap}}}{R} \left(\frac{1}{393,15 \text{ K}} - \frac{1}{373,25 \text{ K}} \right)$$

$$\ln(20 \text{ atm}) = - \frac{\Delta h_{\text{vap}}}{8,31 \frac{\text{J}}{\text{K mol}}} \left(\frac{1}{20 \text{ K}} \right)$$

3 λάθη

$$Q = \int_{(1)}^{(2)} dQ = C_V \int_{(1)}^{(2)} dT$$

$$= (C_V + nR) \int_{(1)}^{(2)} dT$$

$$-\frac{1}{393,15} + \frac{1}{273,15} = \frac{0,46}{\Delta h_{\text{vap}}} \Rightarrow$$

$$\Delta h_{\text{vap}} = \frac{-393,15 + 273,15}{0,46}$$

$$\Delta h_{\text{vap}} = \cancel{273,15} \quad 40000 \text{ J mol}^{-1}$$

Κάθε γραμμή και λάθος