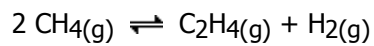
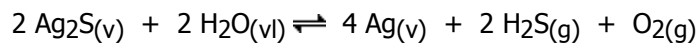


Hoe bereken je  $\Delta_r H^\circ$  voor:

a.



b.



### Oplossing

a.

$$\Delta_r H^\circ = \left( \Delta H_{f, \text{C}_2\text{H}_4(\text{g})}^\circ + \Delta H_{f, \text{H}_2(\text{g})}^\circ \right) - \left( 2 \times \Delta H_{f, \text{CH}_4(\text{g})}^\circ \right)$$

$$\Delta_r H^\circ = \Delta H_{f, \text{C}_2\text{H}_4(\text{g})}^\circ - 2 \times \Delta H_{f, \text{CH}_4(\text{g})}^\circ$$

b.

$$\Delta_r H^\circ = \left( 4 \times \Delta H_{f, \text{Ag}(\text{v})}^\circ + 2 \times \Delta H_{f, \text{H}_2\text{S}(\text{g})}^\circ + \Delta H_{f, \text{O}_2(\text{g})}^\circ \right) - \left( 2 \times \Delta H_{f, \text{Ag}_2\text{S}(\text{v})}^\circ + 2 \times \Delta H_{f, \text{H}_2\text{O}(\text{vl})}^\circ \right)$$

$$\Delta_r H^\circ = \left( 2 \times \Delta H_{f, \text{H}_2\text{S}(\text{g})}^\circ \right) - 2 \cdot \left( \Delta H_{f, \text{Ag}_2\text{S}(\text{v})}^\circ + \Delta H_{f, \text{H}_2\text{O}(\text{vl})}^\circ \right)$$