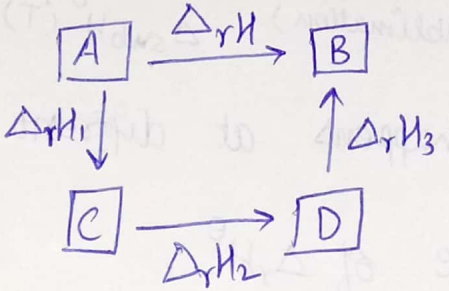
* If enthalpy of an overall reaction $A \rightarrow B$ along one route is $\Delta_r H$ and $\Delta_r H_1$, $\Delta_r H_2$, $\Delta_r H_3$ ... representating enthalpies of reactions leading to same product, B along another route,

$$\Delta_r H = \Delta_r H_1 + \Delta_r H_2 + \Delta_r H_3 \ldots$$

can be represented as



* When a chemical equation is reversed, the value of $\Delta_r H^\ominus$ is reversed in sign

Ex. $N_2(g) + 3H_2(g) \rightarrow 2NH_3(g)$

$\Delta_r H^\ominus = -91.8\ kJ.mol^{-1}$

$2NH_3(g) \rightarrow N_2(g) + 3H_2(g)$

$\Delta_r H^\ominus = 91.8\ kJ\ mol^{-1}$