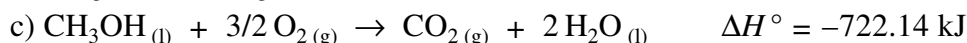
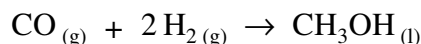


Problems of Thermochemistry: Hess's Law

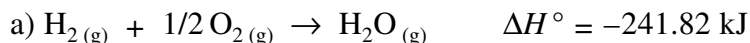
1) Consider the following thermochemical equations at 25 °C:



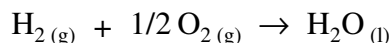
Use the Hess's Law to find out the enthalpy for the following reaction:



2) Consider the following enthalpies of reactions at 25 °C:



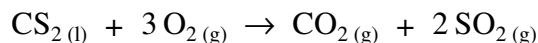
Use the Hess's Law to calculate the enthalpy for the following reaction:



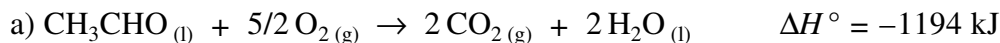
3) Consider the following enthalpies of reactions at 25 °C:



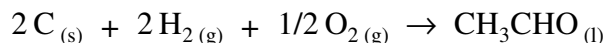
Use the Hess's Law to calculate the enthalpy for the following reaction:



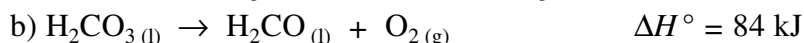
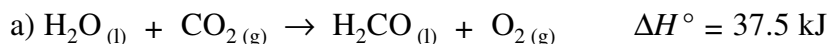
4) Consider the following thermochemical equations at 25 °C:



Use the Hess's Law to calculate the enthalpy for the following reaction:



5) Consider the following enthalpies of reactions at 25 °C:

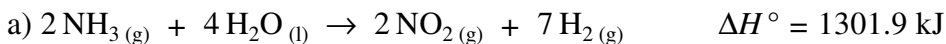


Use the Hess's Law to calculate the enthalpy for the following reaction:

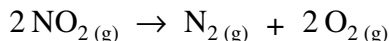


Problems of Thermochemistry: Hess's Law

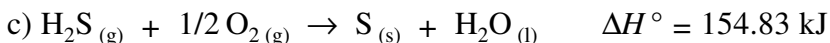
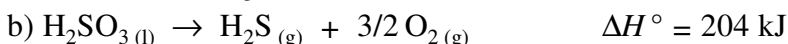
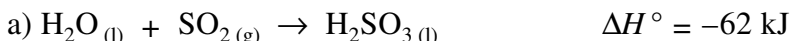
6) Consider the following thermochemical equations at 25 °C:



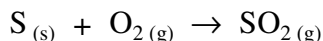
Use the Hess's Law to calculate the enthalpy for the following reaction:



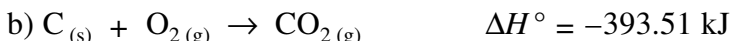
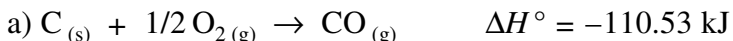
7) Consider the following thermochemical equations at 25 °C:



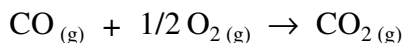
Use the Hess's Law to calculate the enthalpy for the following reaction:



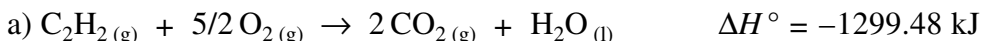
8) Consider the following thermochemical equations at 25 °C:



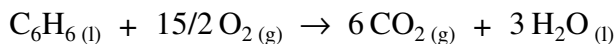
Use the Hess's Law to calculate the enthalpy for the following reaction:



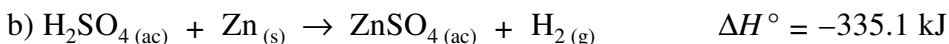
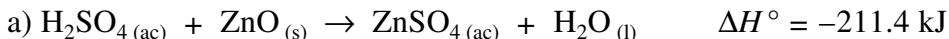
9) Consider the following enthalpies of reactions at 25 °C:



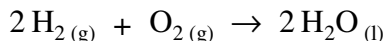
Use the Hess's Law to calculate the enthalpy for the following reaction:



10) Consider the following enthalpies of reactions at 25 °C:

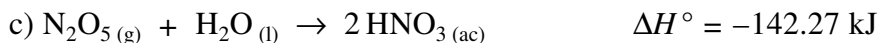
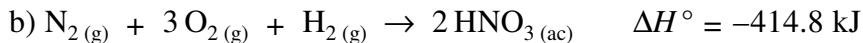
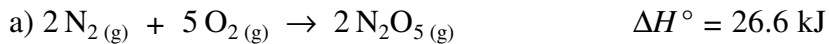


Use the Hess's Law to calculate the enthalpy for the following reaction:

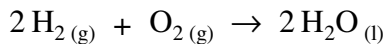


Problems of Thermochemistry: Hess's Law

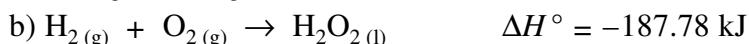
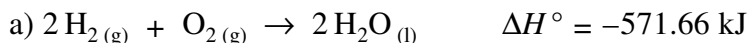
11) Consider the following thermochemical equations at 25 °C:



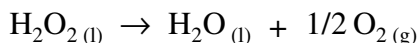
Use the Hess's Law to calculate the enthalpy for the following reaction:



12) Consider the following thermochemical equations at 25 °C:



Use the Hess's Law to find out the enthalpy for the following reaction:


Answers:

- 1) -132.5 kJ.
- 2) -285.83 kJ.
- 3) -1076.8 kJ.
- 4) -164.68 kJ.
- 5) 46.5 kJ.
- 6) -66.36 kJ.
- 7) -296.83 kJ.
- 8) -282.98 kJ.
- 9) -3267.63 kJ.
- 10) -571.66 kJ.
- 11) -571.66 kJ.
- 12) -98.05 kJ.