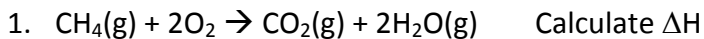
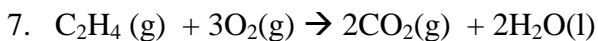
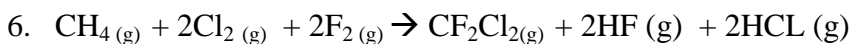
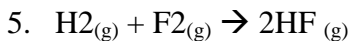
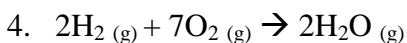
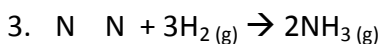
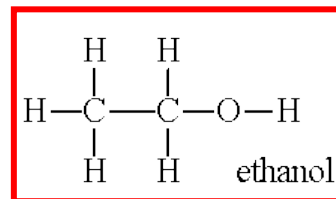
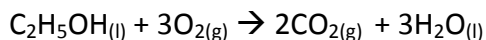


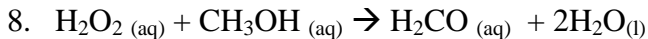
Use the bond energies listed in the table to solve the following problems:



2. Calculate the overall enthalpy change ( $\Delta H$ ) for the combustion of ethanol producing carbon dioxide and water.

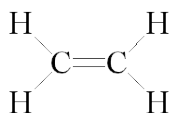


(need to use structural formula of ethene [ $\text{C}_2\text{H}_4$ ])



(need to use structural formula of methanol [ $\text{CH}_3\text{OH}$ ])

Ethene



Methanol

