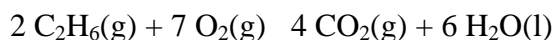


\* VI-2 \_\_\_\_C \_\_\_\_NC  
\*\* VI-3 \_\_\_\_C \_\_\_\_NC

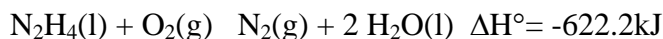
**Chemistry 151**  
**Worksheet 8**

Name: \_\_\_\_\_

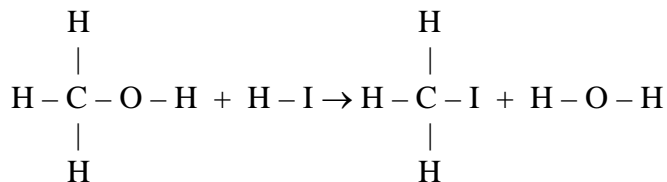
- \*A. (2.0 pts.) Given the reaction below and  $\Delta H_f^\circ$  values from the table provided, calculate  $\Delta H_{\text{rxn}}^\circ$  for the reaction. Indicate whether the reaction is endothermic or exothermic.



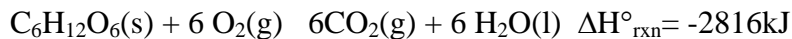
- \*\*B. (1.0 pts.) Given the following reaction and its enthalpy change, indicate whether the reaction is exothermic or endothermic.



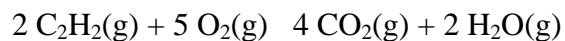
- C. (2.0 pts.) Given the reaction below and bond energies from the table provided, calculate the  $\Delta H_{\text{rxn}}^\circ$  for the reaction.



- D. (2.0 pts.) Given the reaction below,  $\Delta H_{\text{rxn}}^\circ$ , and  $\Delta H_f^\circ$  values from the table provided, calculate  $\Delta H_f^\circ$  for  $\text{C}_6\text{H}_{12}\text{O}_6$ .



- E. (3.0 pts.) Given the reaction below and  $\Delta H_f^\circ$  values from the table provided:  
(At. Wt. C=12.0, H=1.0amu)



1. Calculate the  $\Delta H_{\text{rxn}}^\circ$  for the reaction.
2. Indicate whether the reaction is exothermic or endothermic  
\_\_\_\_\_.
3. Determine the energy released or consumed when 60.0g of  $\text{C}_2\text{H}_2(\text{g})$  is reacted with an excess of  $\text{O}_2(\text{g})$ .