Advanced Chemistry Enthalpies of Formation WS

Instructions: Complete the following problems. SHOW ALL WORK in the empty space below the questions. Remembers the units. Round to the nearest hundredths place.

1. Using values from Appendix C in your textbook, calculate the standard enthalpy change for each of the following reaction:

a) $2SO_2(g) + O_2(g) \rightarrow 2SO_3(g)$

b) $Mg(OH)_2(s) \rightarrow MgO(s) + H_2O(l)$

c) $N_2O_4(g) + 4H_2(g) \rightarrow N_2(g) + 4H_2O(g)$

d) $SiCl_4(I) + 2H_2O(I) \rightarrow SiO_2(s) + 4HCI(g)$