Standard Heats of Formation, $\Delta H_{formation}$

Hess's Law, $\Delta H_{rx} = \Sigma\Delta H_{formation\ products} - \Sigma\Delta H_{formation\ reactants}$

Rx of Formation	Standard Enthalpy of Formation Table $\Delta H_{formation}$	
	Substance	kJ/mol
$Al(s) \rightarrow Al(s)$		0
$Al(s) + 3/2\ O_2(g) \rightarrow Al_2O_3(s)$		-1670
$C(s, graphite) \rightarrow C(s, graphite)$		0
$C(s) + ½\ O_2(g) \rightarrow CO\ (g)$		-111
$C(s) + O_2(g) \rightarrow CO_2\ (g)$		-394
$C(s) + 2H_2(g) \rightarrow CH_4\ (g)$		-75
$C(s) + 2H_2(g) + 1/2\ O_2(g) \rightarrow CH_3OH\ (l)$		-239
$2C(s) + H_2(g) \rightarrow C_2H_2\ (g)$		227
$2C(s) + 2H_2\ g) \rightarrow C_2H_4\ (g)$		52
$2C(s) + 3H_2(g) \rightarrow C_2H_6\ (g)$		-85
$2C(s) + 3H_2(g) + ½\ O_2(g) \rightarrow C_2H_5OH\ (l)$		-278
$Ca(s) + ½\ O_2(g) \rightarrow CaO\ (s)$		-636
$Ca(s) + O_2(g) + H_2(g) \rightarrow Ca(OH)_2\ (s)$		-987
$Ca(s) + S(s) + 2O_2(g) \rightarrow CaSO_4(s)$		-1433
$Cl_2(g) \rightarrow Cl_2\ (g)$		0
$2Fe(s) + 3/2\ O_2(g) \rightarrow Fe_2O_3\ (s)$		-822
$H_2(g) \rightarrow H_2\ (g)$		0
$½\ H_2(g) + ½\ Cl_2(g) \rightarrow HCl(g)$		-92
$H_2(g) + ½\ O_2(g) \rightarrow H_2O\ (g)$		-242
$H_2(g) + ½\ O_2(g) \rightarrow H_2O\ (l)$		-286
$H_2(g) + O_2(g) \rightarrow H_2O_2\ (l)$		-188
$½\ H_2(g) + S(s) \rightarrow H_2S\ (g)$		-20.
$H_2(g) + S(s) + 2O_2(g) \rightarrow H_2SO_4\ (l)$		-811
$Hg(l) \rightarrow Hg\ (l)$		0
$Hg(l) \rightarrow Hg\ (g)$		61
$Mg(s) + ½O_2(g) \rightarrow MgO(s)$		-602
$N_2\ (g) \rightarrow N_2\ (g)$		0
$½N_2(g) + 3/2H_2(g) \rightarrow NH_3\ (g)$		-46
$½N_2(g) + 2H_2(g)\ ½Cl_2(g) \rightarrow NH_4Cl(s)$		-315
$N_2(g) + ½O_2(g) \rightarrow N_2O\ (g)$		82
$N_2(g) + 2O_2(g) \rightarrow N_2O_4\ (g)$		10
$Na(s) + ½Cl_2(g) \rightarrow NaCl\ (s)$		-411
$Na(s) + ½O_2(g) + ½H_2(g) \rightarrow NaOH\ (s)$		-427
$O_2\ (g) \rightarrow O_2\ (g)$		0
$4P(s) + 5O_2\ (g) \rightarrow P_4O_{10}(s)$		-2980
$S(s) \rightarrow S(s)$		0
$S(s) + O_2\ (g) \rightarrow SO_2\ (g)$		-297
$S(s) + 3/2O_2\ (g) \rightarrow SO_3\ (g)$		-395