Example: Find Heat of Reaction at a Different Temperature

Wanted: Heat of Rxn at 1200 C
CO + 1/2 O2 ==> CO2

DelH_c= -282.99 kJ/gmol at 25 C

Heat capacities

	a	b	c	d	T	form	DelH_f	Stoich Coeff
CO	2.90E-02	4.11E-06	3.55E-09	-2.22E-12	C	1	-110.52	-1
O2	2.91E-02	1.16E-05	-6.08E-09	1.31E-12	C	1	0	-0.5
CO2	3.61E-02	4.23E-05	-2.89E-08	7.46E-12	C	1	-393.5	1
Del Cp =	-7.39E-03	3.24E-05	-2.94E-08	9.03E-12				

Basis: 1 gmol of CO **DelH = DelH_r (at 25 C) + Integral (Del Cp dT)**

DelH at 1200 C -280.58 kJ/gmol

Alternate Approach:
Calculate H of products vs. H of reactants **(H = delH_form + Integral(Cp dT))**

	H at 1200 C
CO	-7.27E+01
O2	3.97E+01
CO2	-3.33E+02

DelH_r at 1200 C = -280.57 kJ/gmol