Top of Form

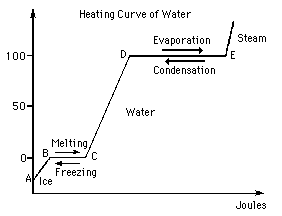
1.) Use the values of ∆Hof given below to calculate (in kJ) ∆Horxn for the following reaction:

**C2H5OH (l)+ 3O2(g) → 2CO2(g) + 3H2O(g)**

|  |  |
| --- | --- |
| Given: | ∆Hof (kJ/mol) |
| **C2H5OH (l)** | **-278** |
| **O2(g)** | **0** |
| **CO2(g)** | **-394** |
| **H2O(g)** | **-242** |

2.) The graph below shows the heating curve of water. Use this graph to answer the following question.  
How much **heat (q)** is required to heat 16 g of ice at -13.0oC (Celsius) to 16 g of water at 65.0oC?

spec. heat of H2O = 4.184 J/goC  
spec. heat of ice = 2.087 J/goC  
Heat of Fusion = 6.02 kJ/mol  
1 mol of water = 18.0g

Bottom of Form