Wkst 1.2: Activation Energies

For the P.E. diagrams below, showing the progress of a chemical reaction, draw the curve and show:

a) ΔH for the over-all reaction
b) if the latter is exothermic or endothermic
c) the E_{af} for each step
d) the E_{ar} for each step
e) the preferred reaction direction
f) the rate-determining step

E_{af} = the activation energy in the forward direction
E_{ar}= the activation energy in the reverse direction

Diagram 1

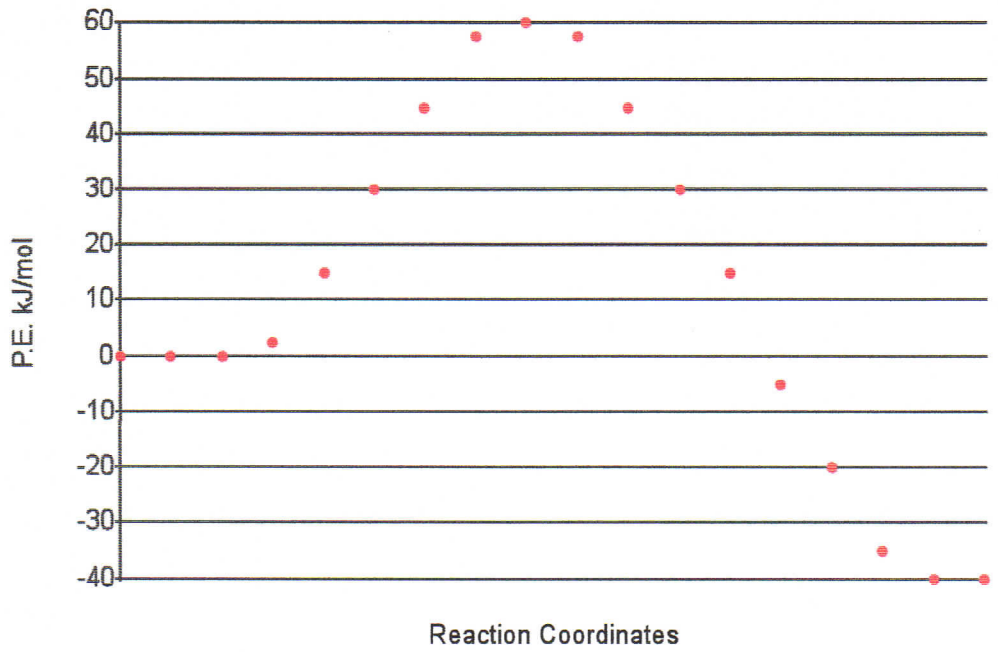

Diagram 2

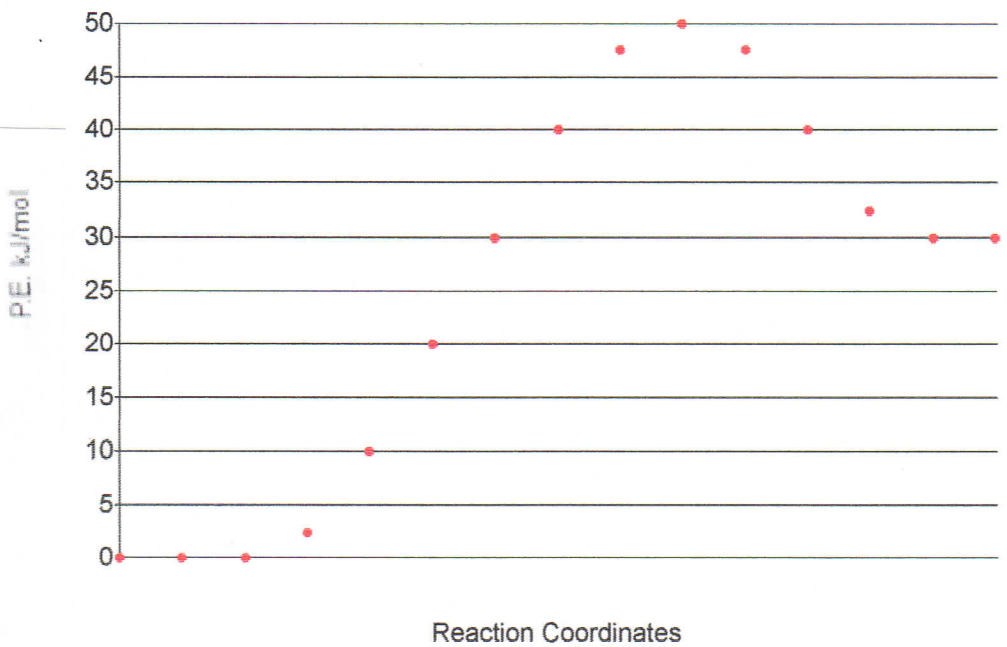

Diagram 3

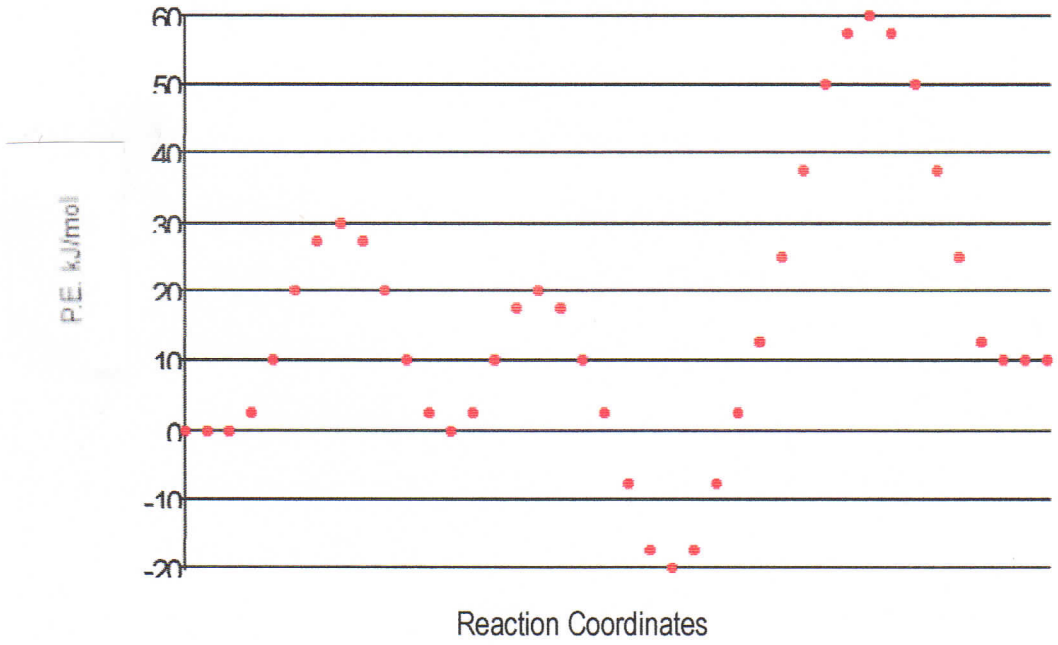

Diagram 4