A The drawing refers to one mole of a monatomic ideal gas and shows a process that has four steps, two isobaric (A to B, C to D) and two isochoric (B to C, D to A). Complete the following table by calculating ΔU, W, and Q (including the algebraic signs) for each of the four steps and for the whole process.



|  |  |  |  |
| --- | --- | --- | --- |
|  | ΔU | W | Q |
| A to B |  |  |  |
| B to C |  |  |  |
| C to D |  |  |  |
| D to A |  |  |  |
| Total |  |  |  |