



Complete this table

	Q	W	ΔU	
A → B			+	
B → C	+			
C → A				
			0	Total

A thermodynamic system is taken from state A ($P_i = 20 \text{ Pa}$, $V_i = 1 \text{ m}^3$) to State B to state C and then back to A, as shown in the PV diagram. Complete the table by inserting a +, - or 0 in each cell.

What is the W_{net} done on the system as it moves once through the cycle ABCA?

- find $W_{A \rightarrow B}$, $W_{B \rightarrow C}$, $W_{C \rightarrow A}$
- check your answer by finding the area of $P \Delta V$ in the diagram
Careful! Areas are never negative, so you must determine +/- work by analysis.