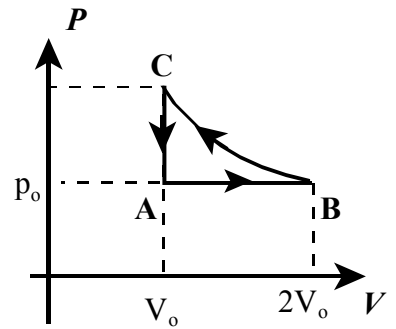


A monoatomic ideal gas is taken through the cycle  $A \rightarrow B \rightarrow C \rightarrow A$  shown in the figure. Find:

1. the heat flowing into the gas during the process  $A \rightarrow B$
2. the work done by the gas during process  $A \rightarrow B$
3. the change in internal energy from  $A$  to  $B$



4. If we know that the internal energy of the monoatomic ideal gas remains constant during the process  $B \rightarrow C$ , what must be the pressure at point  $C$ ?

Find:

5. the work done by the gas during the process  $B \rightarrow C$
6. the heat flowing into the gas during the process  $B \rightarrow C$
7. the heat flowing into the gas during the process  $C \rightarrow A$
8. the work done by the gas during process  $C \rightarrow A$
9. the change in internal energy from  $C$  to  $A$
10. What is the total work done by the system in the complete cycle?
11. How much heat flows into the system in a complete cycle?