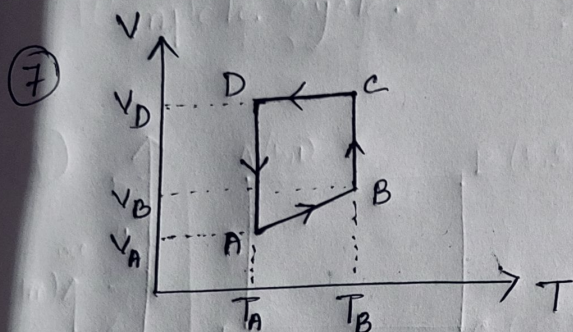


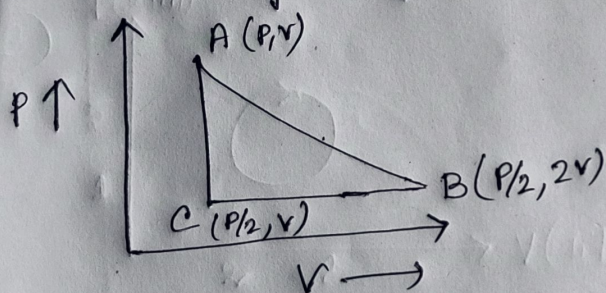
An ideal monoatomic gas is taken around the cycle ABCDA as shown in P-V diagram. The Workdone during the cycle is —

- Ⓐ PV Ⓑ $2PV$ Ⓒ $\frac{1}{2}PV$ Ⓓ Zero.

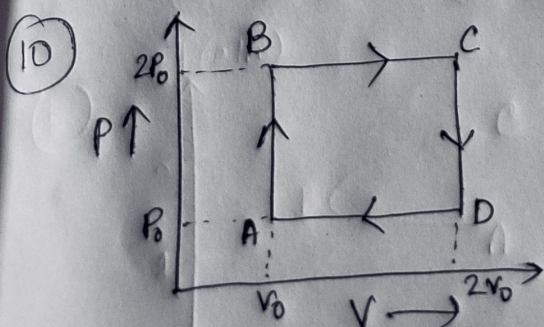
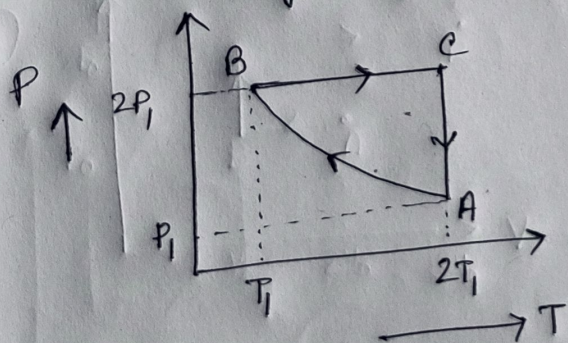


Calculate the total Workdone by the gas during the Complete cycle. Express your answer in terms of gas Constant R .

⑧ P-V diagram given. Convert in to the P-T diagram.

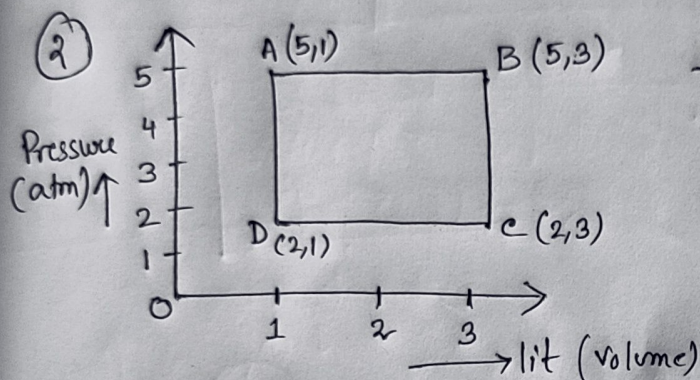


⑨ P-T diagram given. Convert in to the P-V diagram.



P-V diagram given. Convert it into the V-T diagram.

- ① P-V diagram for a cyclic process is a triangle ABC drawn in order. The Coordinates of A, B, C are (4,1), (2,4) and (2,1) respectively. The coordinates are in the order (P,V). Pressure is in Nm^{-2} and volume in litre. Calculate the workdone during the process from A to B, B to C and C to A. Also Calculate workdone in Complete cycle.



The Coordinates are in the order (P,V). Calculate total Workdone in Complete cycle.

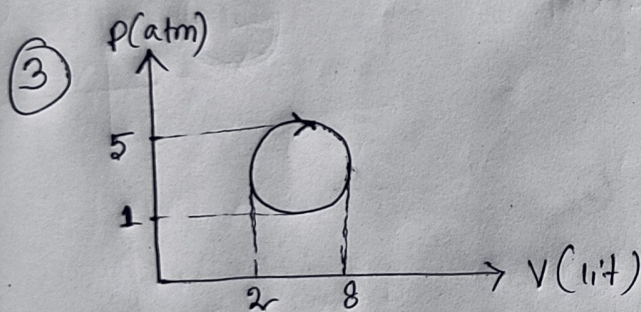
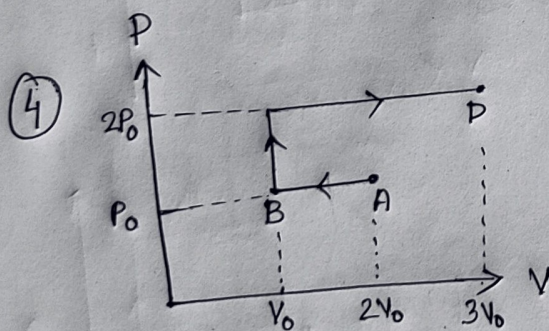
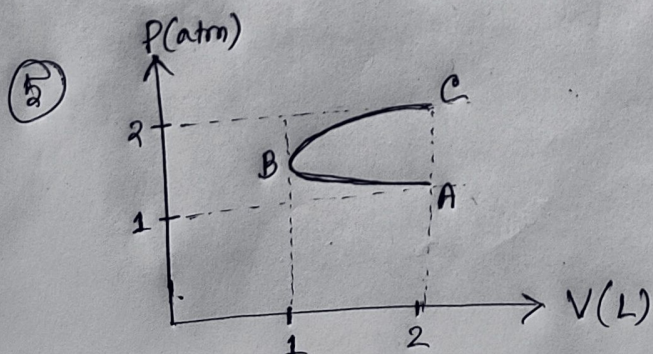


Figure shows a clockwise circular path of a gas on a P-V diagram. What is the total Workdone by the gas around one cycle?



P-V diagram of an ideal gas is as shown in Fig. Workdone by the gas in the process ABCD is →

- (a) $4P_0V_0$ (b) $2P_0V_0$ (c) $3P_0V_0$ (d) P_0V_0



In the P-V diagram shown in Fig. ABC is a Semicircle. The workdone in the process ABC is →

- (a) zero (b) $\frac{\pi}{2} \text{ atm-L}$
(c) $-\frac{\pi}{2} \text{ atm-L}$ (d) 4 atm-L