

T-v diagram for a cycle is depicted on the right, select the best answer

- a) increase/positive
- b) decrease/negative
- c) needs more information
- d) same
- e) zero

1. _____ ΔU_{41}

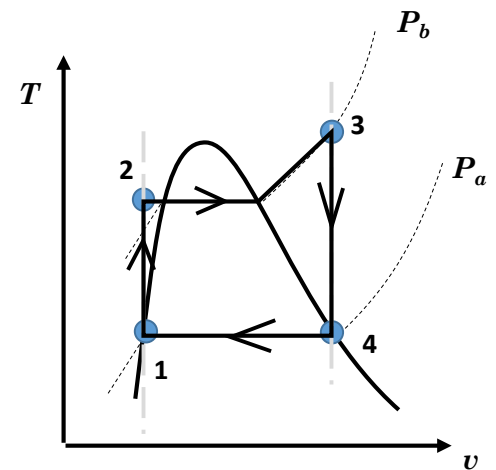
2. _____ ${}_2W_3$

3. _____ ${}_1W_2$

4. _____ ${}_4W_1$

5. _____ ${}_3Q_4$

6. _____ ${}_2Q_3$



7. For a **power cycle**, the net work developed is 150 MJ. What is
- a. (1) the energy transferred by heat into the cycle in MJ, if the cycle thermal efficiency is 30%
 - b. (2) the value of Q_{out} in MJ
(hint, start w/ the 1st law, for a cycle)

