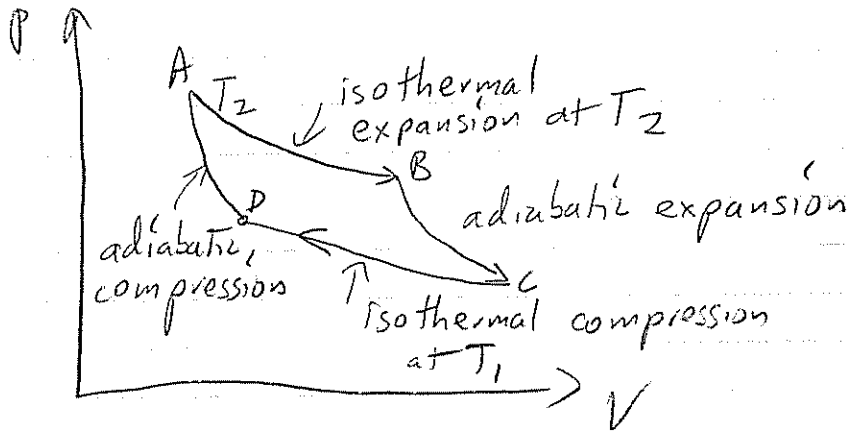


1) Problem 1.1

2) Consider a Carnot engine working between T_2 and $T_1 < T_2$. The engine contains an ideal gas satisfying $PV = NkT$. The gas follows the indicated path in p, V . Calculate η and show it is $\eta = 1 - T_1/T_2$.



Indicate values of p, V at points A, B, C, D by p_A, V_A etc.

3) Problem 1.3

4) Problem 1.5