

✧ **Problem 1.33.** An ideal gas is made to undergo the cyclic process shown in Figure 1.10(a). For each of the steps A , B , and C , determine whether each of the following is positive, negative, or zero: (a) the work done on the gas; (b) the change in the energy content of the gas; (c) the heat added to the gas. Then determine the sign of each of these three quantities for the whole cycle. What does this process accomplish?

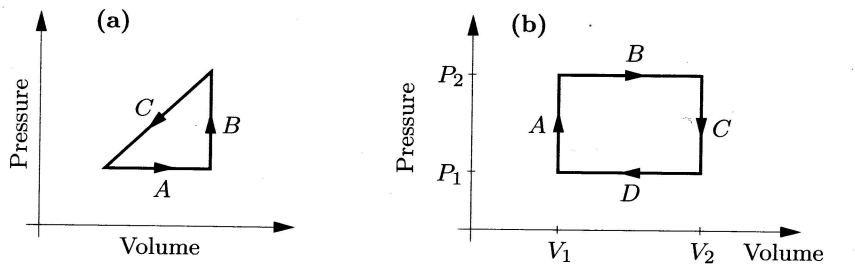


Figure 1.10.