

The following describes a reversible process, EXCEPT.  
The driving force exceeds the opposing force only very slightly at any given time

A process in which heat is NOT allowed to leave or enter the system is said to be \_\_\_\_\_  
adiabatic

The molar heat capacity of ethane at constant pressure is  $52.6 \text{ JK}^{-1}\text{mol}^{-1}$ . Calculate the energy required to heat  $3.00 \text{ mol}$  of ethane from  $305 \text{ K}$  to  $405 \text{ K}$  at constant pressure.  
 $15780 \text{ J}$

Reaction vessels with permeable membranes are examples of \_\_\_\_\_ system.  
Open

A gas expands from  $8 \text{ m}^3$  to  $12 \text{ m}^3$  against a constant pressure of  $1 \text{ atm}$  at  $298\text{K}$ . What is the work done on the gas ?  
 $-0.00002$

An isolated system is one which exchanges \_\_\_\_\_ with its surroundings.  
no matter or energy

One of these is NOT an extensive property of homogeneous system  
Refractive index

Heat transferred to a system depends on these factors, EXCEPT  
The pressure of the system

A sealed thermoflask can be said to be an example of \_\_\_\_\_ system  
Isolated

In the ideal gas equation,  $V = (nRT)/P$ , the dependent variable is \_\_\_\_\_  
 $V$