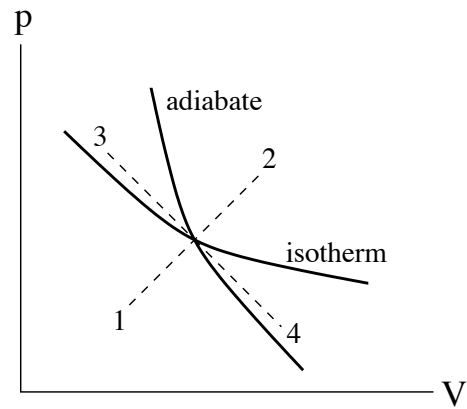


[tex26] Positive and negative heat capacities

The $p - V$ diagram shows an *isotherm* and an *adiabate* for the classical ideal gas. Show that a quasistatic process of the type $1 \rightarrow 2$ is characterized by a *positive* heat capacity and a process of the type $3 \rightarrow 4$ by a *negative* heat capacity.



Solution: