

## Name the Expression

The expression: “It is impossible to construct a device that operates in a cycle and produces no effect other than the transfer of heat from a lower-temperature body to a higher-temperature body”, is known as the ....

Answer: Clausius statement.

Explanation: The 0<sup>th</sup> law states that if two systems are both in equilibrium with a third system, they are in thermal equilibrium with each other, it forms the basis for temperature measurement.

The Kelvin-Planck statement states that it is impossible for any device that operates on a cycle to receive heat from a single reservoir and produce a net amount of work.

The state postulate states that the state of a simple compressible system is completely specified by two independent, intensive properties.

The basic law of thermodynamics doesn't exist, it is nonsense.