



## An ideal gas

An ideal gas has a gas constant  $R = 0.3 \text{ kJ/kg} \cdot \text{K}$  and a constant volume specific heat  $c_v = 0.7 \text{ kJ/kg} \cdot \text{K}$ . If the gas has a temperature change of 100 °C, what is the heat transfer in  $\text{kJ/kg}$

Answer: Insufficient information to determine.

Explanation: The heat transfer also cannot be determined for the same reasoning the work cannot be found. We do not know what exact process took place and heat transfer is different for different processes.