Some steam engine is entering the cylinder of an engine at a temperature of 190 degree celcius. If it leaves the cylinder into the open air at 100 degree celcius, what is the engine's efficiency? a. 19.44% b. 19.48% c. 19.50% d. 19.60%

Solution

the engine's efficiency $\varepsilon_K = \frac{T - T_0}{T} = \frac{(190+273,15)-(100+273,15)}{190+273,15} = \frac{190-100}{190+273,15} = 0,194321 \cong 19.44\%$

Answer: a. 19.44%