In each cycle of a Carnot engine, 248 J of heat is absorbed from the high-temperature reservoir and 50 J is exhausted to the low- temperature reservoir.
What is the efficiency of the engine?

Solution:

From the theory we have a formula: $\eta = \frac{Q_h - Q_l}{Q_h}$, where η – is efficiency, Q_h – is a heat of high-temperature reservoir and Q_h – is a low- temperature reservoir.

Then we have: $\boldsymbol{\eta = \frac{248-50}{248} = \frac{198}{248} \approx 80\%}$