

Lesson 22: Statements of the Second Law and Derivation of Entropy

Read: Sections 5.1-5.3, pp. 177-185

Problems: 5.2, 5.6.

Objectives:

1. Read and study the various statements of the second law on pages 173-174.
2. Understand the flow of heat and work in the basic heat engine and pump in Figure 5.1
3. Perform calculations involving and Carnot efficiency
4. Trace the four steps of a Carnot engine or heat pump on a closed cycle in a PV-diagram.

Notes:

The Carnot Cycle Bonus is an important illustration of calculations around the Carnot cycle.