RECAP 8.1:
Gas power cycles, air - standard assumptions, Carnot cycle.

- Gas power cycle
  - gaseous production of net power output throughout the cycle.

- Air - standard assumptions
  - air modeled as an ideal gas
  - internally reversible processes. (≠ Carnot cycle)
  - combustion process modeled as heat addition process from external source.
  - exhaust process modeled as heat rejection process returning air to its initial state.

- Carnot cycle
  - totally reversible cycle
  - ideal cycle
  - benchmark configuration.

\[ T_{\text{H}} = 1 - \frac{T_L}{T_H} \]

- processes:
  1→2: adiabatic reversible compression
  2→3: isothermal reversible expansion
  3→4: adiabatic reversible expansion
  4→1: isothermal reversible compression.