Physics 231 - 17-Nov-99

- Announcements
- The 2nd Law of Thermodynamics
  - Carnot Cycle
  - Engines & Refrigerators
- Entropy
- quiz

The 2nd Law of Thermodynamic s

- Carnot Cycle
- Engines
- Refrigerators

Entropy

- $\Delta S = \Delta Q/T$

Q1 - Answer = c

Q2 - Problem A - Last name A-K

Three kg of water at 100°C is turned into steam. By how much does its entropy change? (L_V = 540 kcal/kg = 2260 kJ/kg)

A. 6.1 kJ/K

B. 22.6 kJ/K

C. 0 J/K

D. 67.8 kJ/K

E. 18.2 kJ/K

Q1 - Answer = c
Q2 - Problem B - Last Name L-Z

- Two kg of ice is changed into water at 0°C. By how much does its entropy change? (L_F = 80 kcal/kg = 334 kJ/kg)

A. 1.2 kJ/K

B. 2.4 kJ/K

C. 0 kJ/K

D. 0.6 kJ/K

E. 0.3 kJ/K