

12. Which of the following statements are implied by the *second* law of thermodynamics?
- a. The entropy of an engine (including its fuel and/or heat reservoirs) operating in a cycle never decreases
 - b. The increase in internal energy of a system in any process is the sum of heat absorbed plus work done on the system
 - c. A heat engine, operating in a cycle, which rejects no heat to the high temperature reservoir is impossible
- A. a only
B. b only
C. c only
D. a and b
E. a and c
F. b and c
G. a, b and c

Ans. _____