

NEXT-TIME QUESTION

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- b) off altogether.
- c) let it remain at the cool room temperature you desire?



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Answer: b. off altogether

Turn your air conditioner off altogether and save fuel. The amount of heat that leaks into your house depends on the insulation and the difference in inside and outside temperature, ΔT . In accord with *Newton's law of cooling*, keeping ΔT high consumes more fuel. When you turn your conditioner off you minimize both ΔT and fuel consumption.

Will more fuel be required to re-cool the house when you return than would have been consumed to keep it cool while you were away? Not at all. When you return and turn your conditioner on again, you extract heat at a smaller ΔT . The amount of fuel consumed to bring room temperature to its original cool setting is less than the amount consumed to keep it at the cool setting continuously.