Ideal Vapor Compression Refrigeration Cycle

Consider an ideal vapor compression refrigeration cycle. If the throttling process is replaced by an isentropic expansion process, keeping all the other processes unchanged, which one of the following statements is true for the modified cycle?

Answer: The coefficient of performance is higher than that of the original cycle.

Explanation: When the throttling process is replaced by an isentropic expansion process, keeping all the other processes unchanged, then the heat absorbed by the evaporator (desired effect) will increase therefore, the COP will increase.