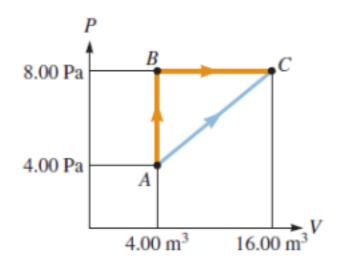
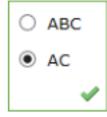
In the figure below, an ideal gas undergoes a change in state from A to C by two different paths: ABC and AC.



(a) Along which path is the least amount of work done by the gas?



(b) If the thermal energy of the gas at A is 17 J and the heat transferred to the gas along the path AC is 230 J, find the thermal energy of the gas at C.

175 🗳 J

(c) If the thermal energy of the gas at state B is 28 J, find the amount of heat added to the gas to change its state from A to B.

