ANSWER FOR MOCK TEST PHY2

Test 1 (Jan 2016)

1. We have the rms speed of the molecules of gas is:

The molar mass of the gas is:

1. The heat transfer to the gas is:
2. A) The change in temperature of the gas is:

b) The work by the gas is:

1. a) We have

This is an adiabatic process, we have:

b) The work done by the gas is:

1. We have the heat balance equation:

The change in entropy is:

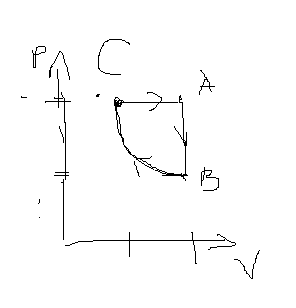
+ sample A:

+ sample B:

+ The total change in entropy is:

Test 2

1. A)Tự vẽ đồ thị



b) The heat transfer through the entire cycle is:

1. A) The translation kinetic energy of each molecule of the gas is:

b) The total translation kinetic energy is:

1. Bài này khả năng cao ko ra nhưng cứ xem cách làm đi để phòng hờ

A) We have the mean free path

The new value of the molecule speed is:

b) The mean free time is

1. A) We have

This is an adiabatic process:

b) The work done by the gas is:

1. A) We have the change in entropy of the box is:

The heat the lake received at each moment is exactly equal to the box released, and the lake also keeps it temperature unchanged, so we have

The total change in entropy is:

b) The process is irreversible because the change in entropy is larger then 0