



SN: _____, Name: _____

Chapter 22-24, Serway; ABSOLUTELY NO CHEATING!

Please write the answers on the blank space or on the back of this paper to save resources.

Example 23.7 The Electric Field of a Uniform Ring of Charge

A ring of radius a carries a uniformly distributed positive total charge Q . Calculate the electric field due to the ring at a point P lying a distance x from its center along the central axis perpendicular to the plane of the ring.

Chapter 22 - Problem 15

An ideal gas is taken through a Carnot cycle. The isothermal expansion occurs at 250°C , and the isothermal compression takes place at 50.0°C . The gas takes in 1200J of energy from the hot reservoir during the isothermal expansion. Find (a) the energy expelled to the cold reservoir in each cycle and (b) the net work done by the gas in each cycle.