

Lecture 5

Pre-Lecture Preparation (due within the first 5 minutes of class):

- Read pages 601 – 607 in the textbook (Serway 9th edition) and do the following:
 - 1) Quick Quizzes 20.3 – 20.4
 - 2) Book Objective Questions (p. 616): 13
 - 3) Book Problems (p. 619): 28

Goals for the Lecture:

- 1) Understand the concept of “states of a system” and “state variables”
- 2) Understand Isobaric, Isovolumetric, Isothermal, and adiabatic processes
- 3) Use PV diagrams to solve problems involving changes in states of a system
- 4) Use the First Law of Thermodynamics to help solve PV diagram problems

Post-Lecture Study Guide (I do not collect this):

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas. Review the pre-lecture questions to make sure you understand them.

Do problems:

Ch 20: Conceptual Questions: 7 and 8

Ch 20: Objective Questions: 14

Ch 20: Problems: 29 and 37

Continue with the additional recommended study problems from chapter 20