

Physics 450: Problem Set #2

Department of Physics and Astronomy
Sonoma State University

Due Wednesday, September 15, 2010, 12:00 pm (in class)

- All problems are from the text: Daniel V. Schroeder, An Introduction to Thermal Physics, Addison Wesley Longman, 1999;
 - Please read 1.3, 1.4;
1. Page 9, Problem 1.17(a);
Hint: You can use the ideal gas law to estimate $\frac{V}{n}$ at different temperatures for nitrogen at atmospheric pressure.
 2. Page 13, Problem 1.18;
 3. Page 13, Problem 1.19;
 4. Page 17, Problem 1.23 (ignore vibrations at room temperature);