ENGR 212-503
Conservation Principles in Thermal Sciences

Problem Set #5 Property tables, ideal and real gasses

Date distributed : 9.24.2003
Date due : 10.6.2003 at 7:00 pm

Return your solution either in class or in my mail box (WERC Rm. 235H) by the date shown above. Please show all your work and follow the rules outlined in the course syllabus.

1 Problems from Chapter 3

Work problems 78C, 81E, 83C, 88C, 90C

2 Problem 3.92E

Work problem 3.92E for air instead of oxygen. For part (a.) use the ideal gas tables in the appendices instead of the empirical specific heat equation. The answers to this revised question are: 177.4, 177.8 and 168.0, all in Btu/lbm.

3 Problems from Chapter 4

Work problems 4C, 7C, 14, 15E, 16, 17, 26, 27, 43, 44