MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Department of Physics

Physics 8.01L **Fall 2005**

Problem Set 8: Momentum, Power, Impulse, Harmonic Motion

Due Friday, November 18 at the start of class at 10am.

Please write your name, recitation number, table number, and tutor name on the top right corner of the first page of your homework solutions. Please place your solutions in the Problem Set Solution hand-in bin at the entrance of the classroom.

Reading:
Young & Freedman Chapter 6 (Section 6.7), Chapter 8 (Sections 8.1-8.5), & Chapter 13 (Sections 13.1-13.4)

Problem 1 Tow Power
Young & Freedman Problem 6.52 (Page 236)

Problem 2 Heart Power
Young & Freedman Problem 6.93 (Page 239)

Problem 3 Bat Impulse
Young & Freedman Problem 8.11 (Page 317)

Problem 4 Hockey Collision
Young & Freedman Problem 8.27 (Page 319)

Problem 5 Cold People Colliding
Young & Freedman Problem 8.37 (Page 319)

Problem 6 Jumping Jack and Jill
Young & Freedman Problem 8.85 (Page 323)

Problem 7 Walking in a Canoe
Young & Freedman Problem 8.94 (Page 324)

Problem 8 Fourth of July Momentum
Young & Freedman Problem 8.97 (Page 324)

Problem 9 Springy Acceleration
Young & Freedman Problem 13.17 (Page 507)

Problem 10 Bouncing Cheddar
Young & Freedman Problem 13.33 (Page 508)