

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
Department of Physics

Physics 8.01X

Fall Term 2002

## PROBLEM SET 5

**Handed out: October 4**

**Due: October 11 at 4 pm in 4-339B.**

Please write your name, subject, **recitation number**, and the name of the recitation instructor on the top right corner of the first page of your homework solutions. The solutions should be placed in the appropriate box in room 4-339B. Note that sometimes you will be able to check your answer at the back of the book. You must always show your work for credit.

**Problem 1:** Young and Freedman 5-46.

**Problem 2:** Young and Freedman 5-91. (Hints for this one: read Examples 5-22 and 5-23 carefully. Use the coefficient of *static* friction. We will see why later when we talk about rolling motion.)

**Problem 3:** Young and Freedman 5-106.

**Problem 4:** Young and Freedman 11-6.