# MASSACHUSETTS INSTITUTE OF TECHNOLOGY Department of Physics

Physics 8.01L IAP 2006

# **Problem Set 10 (IAP1): Angular Motion**

## Due Friday, January 13 at the start of class at 11am.

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 9 (Sections 9.1-9.3), Chapter 10 (Sections 10.1-10.3) & Chapter 11 (Sections 11.1-11.3)

## Problem 1 Up & Down Grinding Wheel

Young & Freedman Problem 9.19 (Page 354)

## **Problem 2 Mixing Motions - I**

Young & Freedman Problem 9.64 (Page 357)

#### **Problem 3 Mixing Motions - II**

Young & Freedman Problem 9.73 (Page 357) Note: Do only parts a & b

## **Problem 4 Multi-Torque**

Young & Freedman Problem 10.6 (Page 394)

#### **Problem 5 Mystery Torque**

Young & Freedman Problem 10.58 (Page 398)

## **Problem 6 Struts & Cables**

Young & Freedman Problem 11.13 (Page 426)

#### Problem 7 Tally-Ho (Oops?)

Young & Freedman Problem 11.42 (Page 428)

### **Problem 8 Carpentry Torque**

Young & Freedman Problem 11.48 (Page 429)

### Problem 9 Sharpening an Ax

Young & Freedman Problem 10.13 (Page 394)

## **Problem 10 Balancing Act**

Young & Freedman Problem 10.59 (Page 398)

### Problem 11 Solving a Class Demo

Young & Freedman Problem 10.70 (Page 399)