## Your Name

$\qquad$ Section

## HOMEWORK \#3 - 8.01 MIT - Prof. Kowalski

Due 4:00PM Thursday Sept. 25, 2003
Topics: circular and relative motion and Newton's first two laws
The following problems are from Young and Freedman $11^{\text {th }}$ edition. Additional parts are indicated after some of the problems.

1. 4.4
c) What is the effect of the 20 degree tilt of the plank on the answers to a and b ?
d) What are Fgx and Fgy, the components of this same force with respect to a coordinate system whose x axis is parallel to the ground?
2. 4.30 Solve part a by finding first the average velocity and then the time.
c) Find the acceleration directly from the velocities without considering the time.
3. 4.25
4. 5.98
5. 4.39
