PHYSICS 5A – HOMEWORK SET 7

Due Wednesday, 11/6/01. Ten points per problem. Answers to the odd-numbered exercises are in the back of the book.

Reading: Young and Friedman Chapter 9

1.) Problem 9.17
2.) Problem 9.33
3.) Problem 9.40; use work/energy to solve this problem, rather than torque/angular momentum which in principle you haven’t yet learned about in Chapter 9 [Answer: 14.7 N]
4.) Problem 9.42; Answer to a) is

\[ v = \sqrt{\frac{2gh}{1 + \frac{M}{m}}} \]

5.) Problem 9.69
6.) Problem 9.72 [Answer: 2.81 m/s]
7.) Problem 9.75