

Homework Assignment 2

Physics 105, Fall 04, Instructor: Petr Hořava

This assignment is due Friday, September 24.

From this assignment on, many homework problems will be assigned from the “Problems” section of various chapters of Hand& Finch (= [HF] from now on); as a rule, I will *not* explicitly rewrite those problems on this sheet, instead I will just refer to them by their Chapter, problem number and page in [HF].

In addition to the five problems assigned below, there is also required reading: Chapter 1 of [HF], with the exception of sections 1.10, 1.11, and Appendix A.

Here are this week’s problems. Enjoy!

1. Identify how many degrees of freedom there are in the six mechanical systems (a)-(f) as described in Question 3 on page 11 of [HF];
2. Problem 6 of Ch. 1, p. 28 of [HF];
3. Problem 12 of Ch. 1, p. 30 of [HF];
4. Problem 22 of Ch. 1, p. 34 of [HF];
5. Problem 24 of Ch. 1, p. 34 of [HF].