

Oberlin College Physics 110, Fall 2011

Assignment 3

Wednesday, 21 September

Reading: HRW chapter 5 (Force and motion, part I). This is the most important chapter of the book, and every section demands your careful attention.

Notes for Monday's lecture are in the course notes, section 2.7 ("What causes motion?").

Workshops: Review this week's Monday–Tuesday workshop material by reading the course notes, sections 4.6 ("Acceleration problem") and 4.7 ("Talking about motion with constant acceleration").

The Wednesday–Thursday lab workshop for this week is "Car Jump" — for next week it is "Pendulum Challenge". Remember to read the lab workshop description a day before going to the workshop meeting, and to answer the "warm up questions" through BlackBoard.

Problems: Due Wednesday, 28 September.

- HRW problem 3–16: *Vector gymnastics*
(You might want to review the notes section 4.4 on "significant figures" concerning functions like square root and arctangent.)
- HRW problem 4–20: *Moving target*
- Additional problem 40: *Flying apple*
- Additional problem 44: *Artemis in a pickup truck*
(Look also at additional problems 37, 38, and 39 for help with this style of problem.)
- HRW problem 5–15: *Stationary salami*
- Additional problem 55: *Sliding salami*