

Physics 211

Elementary Physics

Fall 2012

Instructor: Dr. Geoffrey Lovelace
Sections 1 & 70

Lecture 5 — 9/11/12

I. Trigonometry review

A. SOH-CAH-TOA

B. Pythagorean theorem & a trig identity

II. More constant acceleration in 1D

A. Example: Ball toss

B. Group problem: stopping distance

III. Intro to 2D motion

A. Geometric vector addition (“tip to tail”)

B. 2D motion reduces to 2 independent 1D problems

C. Projectile demo: ball toss on a train (<http://physics.fullerton.edu/departments/lecture-demos/96>)

IV. Assignments

A. Reminder: homework #2 due Thursday at 11:59PM

B. Exam #1: in 2 weeks, covers chapters 1-3. (We are now going through Ch. 3.)

C. Class participation: ranking vector sums