

Lecture 2

Pre-Lecture Preparation:

- Read pages 21 – 39 and be able to answer the following:
 - 1) What is the difference between a vector and a scalar?
 - 2) What is the difference between distance and displacement?
 - 3) What is the difference between average speed and average velocity?
 - 4) Construct a motion diagram for a car that starts from rest, moves to the left with increasing speed for 5 seconds then continues moving to the left at constant speed for the next 5 sec.
 - 5) Book Problems (p. 51-53): 1, 3, 15, and 29

Goals for the Lecture:

- 1) Given one of the following three graphs: x vs t , v vs t , and a vs t , be able to draw the other two
- 2) Be able to solve 1-D kinematics problems (constant acceleration) using the equations and a graphical approach

Post-Lecture Study Guide:

Review the worksheets or other lecture material within 24 hours (preferably the same day as the lecture) to reinforce the ideas.

Do problems:

Ch 2: 19, 35, 51, 58

Continue with the additional recommended study problems from chapter 2