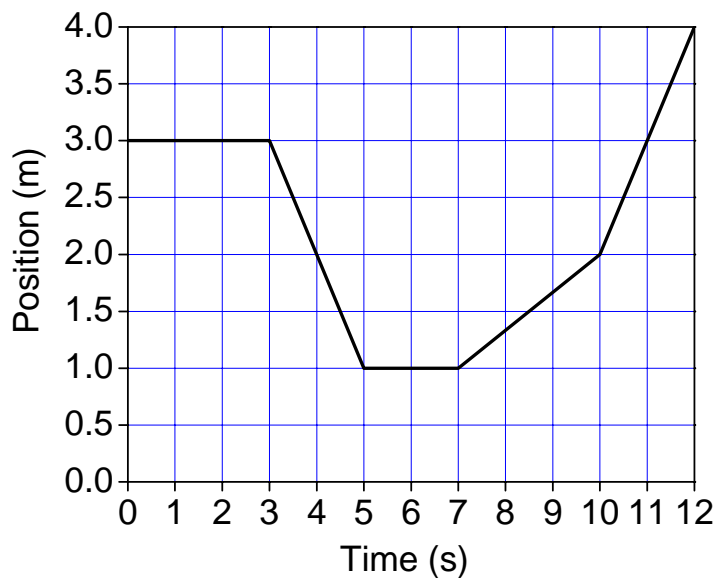


Physics 115 – Section 201

Homework #10

Due April 25, 2007

Essay 1, 10 points: Describe in words the motion of the person who made the following graph.



Essay 2, 10 points: In Lab M3 you made a graph of position vs. time for a person walking at a steady pace. When you graphed position vs. time, the line looked very smooth. When you graphed velocity vs. time, the line was less smooth, and had some up-and-down bumps. Why is this?

Problem 1, 10 points: Jill makes a motion described by the equation  $p = 1.0 \text{ m} + (3.0 \text{ m/s}) \cdot t$ , while Jack makes a motion described by  $p = 3.0 \text{ m} + (1.0 \text{ m/s}) \cdot t$ . What is each one's speed? What is each one's velocity? Graph their motions. At what time are they at the same place? What is their position at that time?

Problem 2, 10 points: Write down the equation for the position as a function of time of the person who made the following graph. What is the person's speed? What is the person's velocity?

