

## Unit II Objectives

### What you should know when all is said and done

1. You should be able to determine the **average velocity** of an object in two ways:
  - a. determining the **slope** of an **x vs t** graph.
  - b. using the equation  $v = \frac{\Delta x}{\Delta t}$
  
2. You should be able to determine the **displacement** of an object in two ways:
  - a. finding the area under a **v vs t** graph.
  - b. using the equation  $\Delta x = vt$
  
3. Given an **x vs t** graph, you should be able to:
  - a. describe the motion of the object (starting position, direction of motion, velocity)
  - b. draw the corresponding **v vs t** graph
  - c. draw a motion map for the object.
  - d. determine the average velocity of the object (slope).
  - e. write the mathematical model which describes the motion.
  
4. Given a **v vs t** graph, you should be able to:
  - a. describe the motion of the object (direction of motion, how fast)
  - b. draw the corresponding **x vs t** graph
  - c. determine the displacement of the object (area under curve).
  - d. draw a motion map for the object.
  - e. write a mathematical model to describe the motion.

#### **Additional Study Hints:**

Look over all the old worksheets and quizzes.

Make up a **x vs t** graph and see if you can draw the **v vs t** graph.

Get together with your lab partners and review.