## W1.02

POSITION, VELOCITY & ACCELERATION VS. TIME INTRO EXAMPLE (9/17/2004)



Given the following plot that shows the velocity of an object as a function of time.

- 1. Describe the motion of the object. Assume that the object's initial position is +5 m. The object begins moving backward slowing down for 2 seconds, then is moving forward speeding up for four seconds, and then is moving forward at constant speed for two seconds.
- Determine the ?s of the object for the <u>first two</u> seconds.
  -10 m
- 3. Determine the ?s of the object for the <u>next four</u> seconds. +40 m
- 4. Determine the ?s of the object for the <u>last two</u> seconds. +40 m
- 5. Determine the position of the object at the end of each interval. -5 m, +35 m, +75 m
- 6. Plot s vs. t.
- 7. Plot a vs. t.

