

PhyzJob: Little Dudes Ride Again II

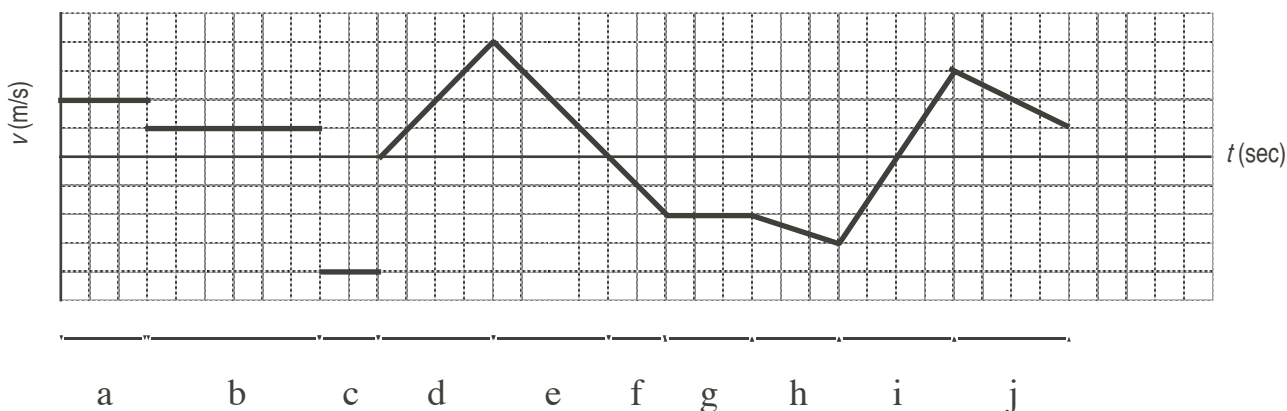


1. In *PhyzJob: Little Dudes II*, we learned how to plot velocity *vs.* clock reading graphs for our little dudes. In *PhyzJob: Little Dudes I*, we learned that $v = \Delta x / \Delta t$.

a. Rewrite the equation stated above, solving for Δx .

b. Examine a single velocity *vs.* clock reading graph, such as one drawn in *Little Dudes II*. What is a *graphical* interpretation of your equation for Δx above? (For example, a graphical interpretation of $v = \Delta x / \Delta t$ is that the velocity of a body is equal to the slope of the plot of position *vs.* clock reading.)

2. Apply your interpretation above to the velocity *vs.* clock reading plot below. Determine the change in position Δx the body underwent in each interval indicated.



a.

e.

i.

b.

f.

j.

c.

g.

d.

h.

3. Matching.

Match the symbol to the appropriate phrase.

x_0

Δx

x

change in position

final position

initial position

4. Determine the value of the initial position, change in position, and final position of the body whose velocity vs. clock reading is shown above.

a. $x_0 =$

$\Delta x =$

$x =$

e. $x_0 =$

$\Delta x =$

$x =$

i. $x_0 =$

$\Delta x =$

$x =$

b. $x_0 =$

$\Delta x =$

$x =$

f. $x_0 =$

$\Delta x =$

$x =$

j. $x_0 =$

$\Delta x =$

$x =$

c. $x_0 =$

$\Delta x =$

$x =$

g. $x_0 =$

$\Delta x =$

$x =$

d. $x_0 =$

$\Delta x =$

$x =$

h. $x_0 =$

$\Delta x =$

$x =$

5. SUPER-CHALLENGE. Use the information above to plot the position vs. clock reading of the body. *Careful: There is more to this than plotting the points and connecting the dots!*

