1.5

Which segment/s shows the following: Velocity

Constant velocity C

$\Delta x = +$ A, B, C

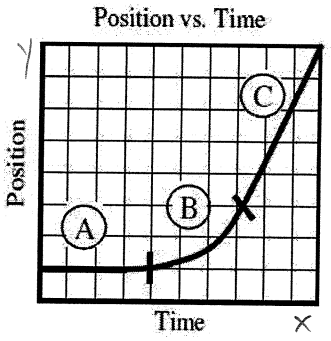
Velocity = 0 A

$\Delta x = -$ none

Acceleration B

Acceleration = 0 A, C

v = + B, C



Which segment/s shows the following: acceleration

Constant velocity A, C, E

v = + A, first part of B

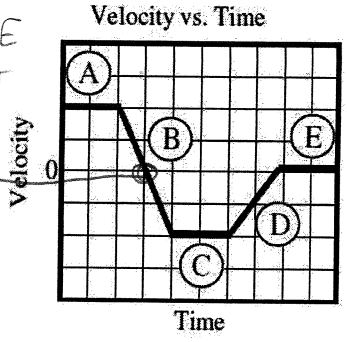
Velocity = 0 E + here

a = − B

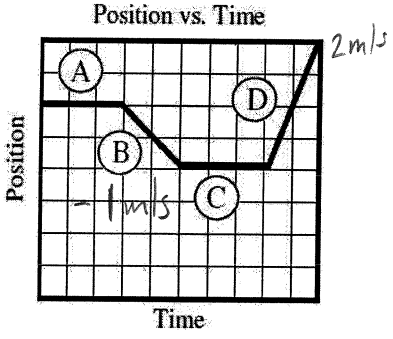
$\Delta v = -$ B

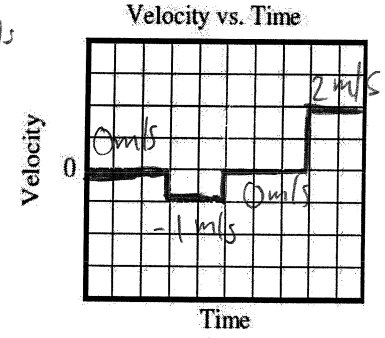
a = + D

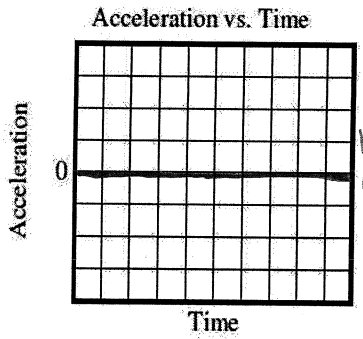
Acceleration = 0 A, C, E



For each of the following three examples, translate the given graph to the other two. For these graphs assume that each vertical square equals 1 meter and each horizontal square equals 1 second.

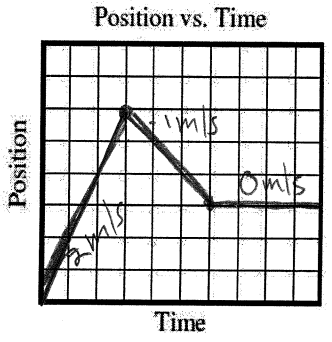


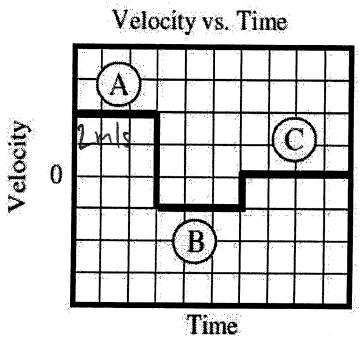


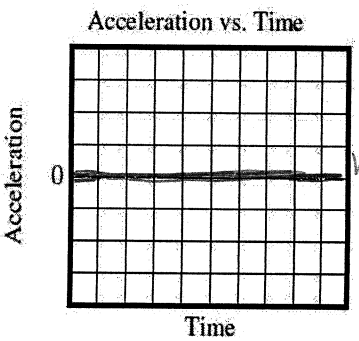


no change in accel

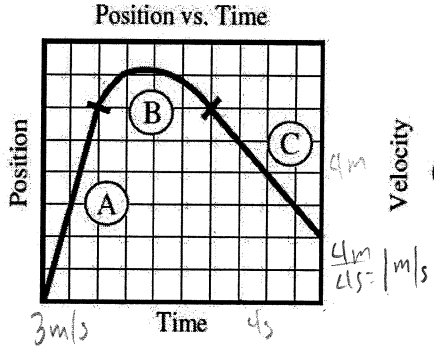
I did not know V_i so I started low



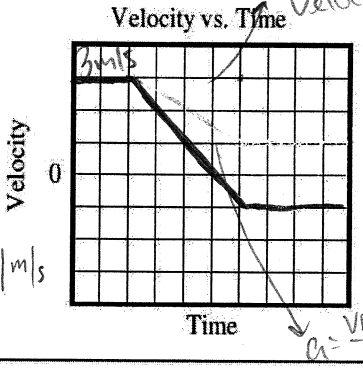




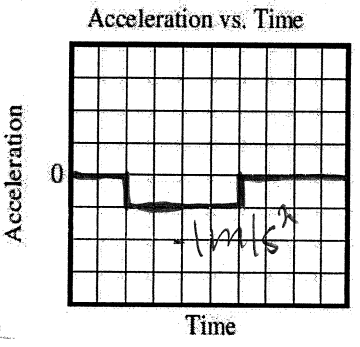
no change in accel



Change in Velocity = Δv



$a = \frac{V_f - V_i}{t}$



$$\frac{-1\text{ m/s} - 3\text{ m/s}}{4\text{ s}} = \frac{-4\text{ m/s}}{4\text{ s}} = -1\text{ m/s}^2$$