Problem 1

Find the average velocity according to the table given

Here is a table I got



* Average velocity at the first second
* Average velocity at the last 3 seconds
* Average velocity at the entire period of observation

So, the solution for the problem a we find the velocity for the seconds we are given. t=1 x=2.3 v=x/t v=2.3/1=2.3

v=2.3m/s

Vavg = (2.3-0)/(1-0) = 2.3 m/s <- Answer

For the b one, t=3, t=4, t=5. I got v3=20.7/3=6.9 v4=36.8/4=9.2 v5=57.5/5=11.5.

Vavg = ⍙X/⍙t

Vavg = (57.5-20.7)/(5-2) = 12.26 m/s <- Answer

For the c one we got time 5-0 and delta x as 57.5-0

We get 57.5/5=11.5m/s <- Answer

Problem 2

Here we got the picture of the problem number 2



V1=25 m/s V2=22 m/s t=3.50ms

Average acceleration formula is Aavg=(V0-V)/⍙t

So, we get (22-25)/3.5\*10-3 m/s2 = -0.87\*103m/s2 <- Answer

Thank you

Student ID : 201923250

Name : Kobilov Ilkhomjon